DOCUMENT RESUME

ED 126 650 EC 090 566

AUTHOR Hartford, Dale
TITLE Learning to Learn: Parental Pre-School Approach for Early Intervention of Learning Disabilities.
INSTITUTION Cheshire Public Schools, Conn.
SPONS AGENCY Bureau of Elementary and Secondary Education (DHEW/OE), Washington, D.C.
PUB DATE [76]
NOTE 61p.

EDRS PRICE MF-$0.83 HC-$3.50 Plus Postage.
DESCRIPTORS *Educational Programs; Exceptional Child Education; Intervention; *Learning Disabilities; Mothers; Parent Attitudes; *Parent Child Relationship; Parent Role; *Parent School Relationship; Preschool Education; *Preschool Programs; Program Descriptions; Teamwork

ABSTRACT

Described is a preschool program providing early intervention and diagnostic planning for 26 3-and 4-year-old learning disabled children. Common problems with the children are discussed; and mothers' attitudes, roles, and benefits are recounted in their own words. The team approach to learning is examined with the role of each staff member outlined, including that of the mother as a member of the team. The text is illustrated with photographs, and drawings of the floor plan used are included. Some discoveries and problems of the program are noted. (IM)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED126650

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

learning to learn

PARENTAL PRESCHOOL APPROACH
FOR EARLY INTERVENTION OF LEARNING DISABILITIES

ESEA Title III, ESEA Project
Cheshire, Connecticut

EC 090566

ACKNOWLEDGEMENTS

This booklet, like the program it describes, exists only because the parents of Cheshire children with learning problems wanted it and were willing to work to make it a reality. All of those involved in the preparation of this work are grateful to the Cheshire Board of Education for its continuing support; to Dr. Stephen August, Superintendent of Schools, for his encouragement and guidance; and to Highland School Principal Chester W. Crowley, Jr., for the unfailing enthusiasm and intelligent direction which have been major contributions both to the program and to this publication. Special acknowledgement is due to Dr. Roger E. Richards, Title III Coordinator, Connecticut State Department of Education; and Mr. David R. Murphy, Federal Program Fiscal Administration, Connecticut State Department of Education, who read the manuscript and offered many helpful suggestions. This booket was prepared with a Title III grant to the Cheshire, Connecticut School System.

CREDITS

This publication was written for the Cheshire School System by Dale Hartford. Photography by Mr. Hartford and Joy Wulke, Felix Drury and John (Jake) Foley. Drawings by William Lyle.

contents

INTRODUCTION 1
CHILDREN WHO FAIL 4
MOTHERS AND THEIR CHILDREN 12
TUESDAY, NOVEMBER 12TH 20
THE CHILDREN 28
MOTHERS AT WORK 36
A PLACE FOR CHILDREN 38
THE STAFF 50
EVALUATION 52
DISCOVERIES 55
PROBLEMS 56
AND WHAT NOW? 57

introduction

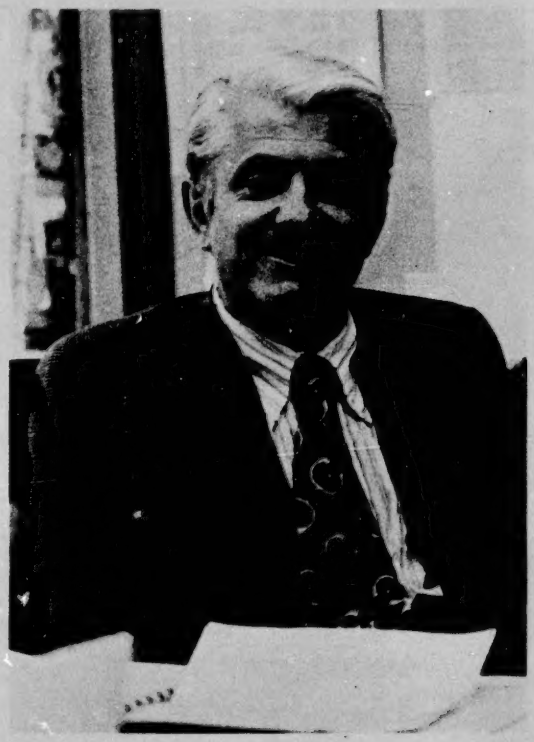
THIS IS A PUBLICATION ABOUT HOPE. About the kind of hope which is expressed in this simple, touching poem:

I long to hold him in my arms
to develop and cherish all his charms,
Instead his hyper mind does play
havoc with my every day.
He moves so fast, so wild, so far,
out of reach, in front of car.
My heart does stop; I get uptight,
wearisome in my daily plight.
Why can't I find a way to cope?
Please, God, please, give me hope.

That poem was written by the mother of a three-year-old boy shortly after both mother and child were enrolled in a program located in Cheshire, Connecticut. The program, funded under Title III of the Elementary and Secondary Education Act of 1965, is called "Parental Pre-school Approach to Early Intervention of Learning Disabilities." It began functioning in our Highland School in the 1972-1973 school year. And it has a great deal to do with hope.

This booklet describes this program in a comprehensive but unusual way. Like the program itself, this publication emphasizes the elusive human qualities which are critically important to the program's success. While hard evaluative data is presented in some detail, the focus is on matters which are difficult to present statistically: How can education best utilize a mother's sensitivity to and knowledge about her child? How can an educational team *which includes the mother* effectively engage in diagnostic/prescriptive planning for very young children who, it is safe to predict, are going to have difficulty learning in the traditional classroom setting? What kind of resources outside of the school system need to be focused on the problems of such children? How do myriad environmental factors affect a child's ability to learn? The questions go on and on; this program provides a series of intriguing answers.

The program is presented in these pages as a working process. Because mothers are at its heart, they are at the heart of this presentation. Most often their involvement in and



Dr. Stephen August

perceptions about the program are presented in their own words. They have been working partners in the preparation of this statement. In these pages, they come alive as real people, with deep concerns, understandable anxieties, and remarkable commitment. Their children, too, are removed from statistical columns to become real boys and girls, together learning how to deal with the unique and troublesome ways in which they perceive the world around them. Because each such problem *is* unique, the program process must exemplify an intrinsic flexibility which permits it to adjust, modify, shape and emphasize on a daily basis.

In many respects, this program represents a distillation of what we in the Cheshire school system have learned in the past 15 years about the special problems of the child of normal intelligence who has a handicapping condition.

Although Cheshire's mean I.Q. on group tests is 113, about 33 per cent of our children

were consistently found to be underachievers, and 17 per cent were clearly identified at the time of school entrance as exhibiting predictors of learning problems. Another one per cent had already been diagnosed by outside agencies as being specifically handicapped.

As the pre-school plan was conceived, we had come to recognize the need for a local program to provide a bridge from home to school so that learning difficulties can be more readily identified and remediated at an earlier age than entry to school.

Who are these children with handicapping problems — who manifest some degree of learning difficulty which may interfere with future education? They are, we have found, the children with speech problems, language delay, medical problems, hyperactivity or possible emotional problems.

It has been discovered that the number of such children is much larger than schools generally recognize. Connecticut state law has established the responsibility for providing special programs for all children with handicapping conditions when they are 3.8 years of age. Each year more parents are becoming aware of their rights under existing law, and are requesting special programs. As educators, we in Cheshire agree with the lawmakers that these children need educational intervention at the earliest possible time.

In a decade or more of work, we have come to feel strongly that learning disabilities are best handled during a child's formative years. The age of five, we believe, is often too late to begin responding to patterns of the child's learning behavior, if preventative rather than remedial measures are to be instituted.

The principal conclusion which these concepts have led to in Cheshire is that hearing and/or vision impaired, cerebral palsied and autistic children have some common needs which *may* be better served in a positive mother-child learning setting with more nearly normal children. Simultaneously, the nearly normal children with special needs may also be well served.

Responding to these developing ideas, our main thrust in special education for the past 10 years has been toward reaching the child as early as possible; e.g., developmental placement by behavioral rather than chronological age; daily perceptual training in every elementary class; mother-child tutoring; resource rooms from Grades 1 through 10; self-contained classes gradually yielding to the mainstream; a pilot program at the kindergarten level, and collection of data regarding school entrants.

While we in Cheshire have been acutely aware of the need to reach children with special needs before the age of five, until this Title III project began there were no local facilities for pre-school handicapped children. Nor were there facilities for children with lesser handicapping conditions.

A former Title III project, the Developmental Resource Center, was helpful in developing concepts that have been beneficial in helping school-age children. We believed they would be even more valuable in preventing learning disabilities if utilized at the pre-school level. Simply stated they are:

1) Knowledge of a child's developmental level, which differs from mental level, is helpful in planning an academic program for him.

2) Helping the child become an active problem-solver by picking up clues from his environment allows him to discover his own learning process and to decide to find more suitable approaches to learning.

3) Mother is not only her child's first teacher but can be his best once she is taught how to recognize the first two concepts.

4) The physical environment can be synchronized with the curriculum to facilitate learning.

Of course we are not alone in recognizing the need to serve handicapped pre-school children with specialized programming. And yet the collaborative effort described in these pages has a number of unique features:

1) Within the program, handicapped children are served in an integrated setting with normal children with special needs.

2) While other schools provide individual services for children, this program allows for the simultaneous integration of child, parent, and public school team into a common, unified effort.

3) Of special interest is the involvement of the parent in a much more comprehensive way than is typically found in other pre-school programs.

4) Because of this level of involvement, parents identify with the school as a whole, rather than being made to feel their child is further segregated because of his handicapping condition.

5) There's positive proof that siblings of

children in the program derive secondary benefits from the parents' increasing knowledge of child behavior.

6) Since the program is located within an elementary school, there are many opportunities for the integration of services which are fully explored.

7) Finally, the program design demands the continuing search for new methods or techniques to facilitate learning.

So much for introductory comment. Let me briefly review how the program works, what kind of children it serves, and what resources it draws upon. All are topics presented in some detail in the pages which follow.

The program presents a play setting in which children and their mothers interact for two hours per day. Mothers of four-year-olds attend four days a week; mothers of three-year-olds attend three days a week. A teacher and a teacher aide help in guiding and elaborating on the activity of the moment. Time is provided for a small group activity for the children while mothers engage in observations, recording data, consultation with consultants, and workshops.

Mothers balance their time between child interaction and child study in relation to their child's needs. The adults provide the physical setting and the play situations. Within this setting, the child is free to choose an activity singly, or to join other children. He is also free to change activities, or rest as he chooses. The educational materials are created in response to individual children's needs by the team of adults.

Nutrition, physical movement, spatial relationships, fine motor coordination, communication and emotions are highlighted and discussed with parents as they observe their child engaged in a pleasurable activity. From such observation comes a body of knowledge which increasingly serves the child as he learns to deal more effectively with his learning problem.

In the process, the teacher-director and the teacher of the group join with the parent in studying the child's learning style, his range of interests, and his special needs. Task-breaking is the adults' central problem, so that increasingly the child can experience success in his activities. The library, cafeteria, health department, kindergarten, gymnasium and auditorium, along with appropriate elementary school staff, serve as ancillary services in this process.

The program's consultants, including an optometrist, a psychiatrist, a school social worker, architect and others, are introduced into this learning process in the ways in which they can serve most effectively. All work together collectively in a team approach.

Children remain in the program for one or two years, depending on need. Concluding its third year as this publication was prepared, the program has served children with the following identified learning problems: autism, cerebral palsy, hearing impairment, multiple handicaps, vision impairment, birth trauma, hyperactivity, birth prematurity, language problems, emotional disturbance and medical problems. Total enrollment in the program's third year was 26 children.

The pre-school program occupies two large classrooms in Highland School. Further, as noted earlier, it utilizes many of the school's facilities to enrich learning experiences for the children.

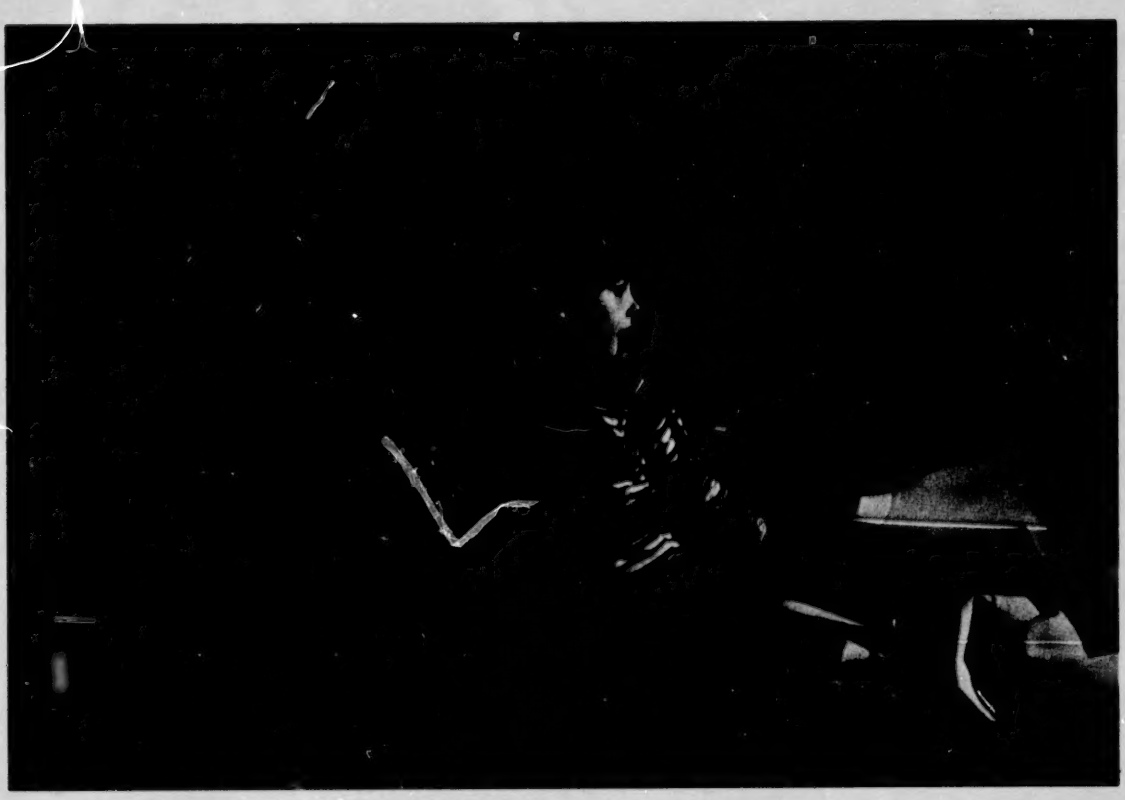
Staff includes two special education teachers and their aides; a teacher coordinator, and the school psychologist, who is the project director. Services as needed are provided by a speech therapist, school social worker, an educational materials specialist, and the consultants. The school principal is a key figure in insuring that the pre-school program is well-integrated into the mainstream of the town educational effort. The effort is no less intent to insure this same level of integration, with support services as needed, as these pre-schoolers move into our elementary school classrooms.

If asked to sum up the pre-school program in a single sentence, I would likely say: It is a remarkably comprehensive approach in dealing with the special needs of learning handicapped children during their every waking moment.

Perhaps the totality of the program experience is a key factor underlying its success.

Stephen August

Dr. Stephen August
Superintendent of Schools
Cheshire, Connecticut



This is Ricky, who has come to know the pleasure of success.

children who fail

CHESHIRE'S PARENTAL PRE-SCHOOL program has a magnetic quality. It draws visitors almost daily, from other schools, public and private; from Day Care centers; from agencies working with and for the handicapped.

They slip into the observation room, unnoticed by the children, and watch the day's activity through a large, one-way mirror. They may, as well, glance now and then at a nearby closed-circuit TV receiver, with a scanning camera recording activity in the program's second room.

Some visitors are simply curious, some skeptical, most knowledgeable and enthusiastic. They leave, most often, with varied impressions, responding to that program feature which struck the most responsive chord. No matter that the expert voice at their elbow cautions them that the program must be viewed whole. Many are fascinated by the creative, innovative use of space, of color and light, of vertical and horizontal climbers. Others, research-oriented, scan evaluation data to learn what is happening to this interesting mix of learning disabled children. Still others are impressed by the array of program consultants. An architect? An optometrist? How do they work? What do they do?

And yet, while it is easy to be seduced by a single fascinating element in the program's design, it is a rare visitor, indeed, who does not come away intrigued – and perhaps challenged – by the program's most unique feature: the total involvement of the parents in the learning process, and their full participation in the on-going study of learning behavior. In Cheshire's pre-school plan, parents

Glen is discovering he has two sides to his body.

come to school with their children — and stay.

The 26 program children, three and four-year-olds, include a broad spectrum: the seriously disabled youngster — hearing and/or vision impaired, cerebral palsied, autistic — along with nearly normal children with special needs. The program does not, in fact, recognize a definitive line between a handicapped child and a child with a handicapping condition.

There are many programs for the seriously troubled child. But the Cheshire program, by its existence, poses the question: need he be isolated, learning only with children similarly afflicted? The thrust in Cheshire has been to design a setting and a program where such a child can learn to his full potential, in the expectation that, with continued support, he will be able to function well in the normal school setting.

At the same time, the program offers unique learning opportunities for the child with normal intelligence who is lagging behind in language and/or motor abilities, who may have speech problems, and who as a consequence is afflicted with a poor self-image. The frustration of repeated failure — in communicating, in running and climbing and learning — is eroding his confidence.

Ricky is one such child. He deserves a closer look, for in many ways he is representative of the "LD" student.

His mother is Mary Lou. She is young, pretty, a certified teacher and the mother of two. She thus makes her educational judgements about Ricky from converging perspectives: with a mother's sure knowledge of her child, and with the objective eye of the well-trained professional.

"Without this special help," she said, "I'm confident that Ricky would be in kindergarten now. But he would be withdrawn, extremely shy, very quiet. He would be sitting in a corner, withdrawing still more with each passing day. And if he didn't happen to have a teacher who could pick up his problem, he simply wouldn't be able to function with a large group. It would be a disastrous start for him." Ricky, bright as he is, would probably become one of the children who fail.

Ricky, now five, is more than simply shy.

Recalls his mother, "When Ricky was 2½,

In a quiet setting, mother helps her hyperactive child focus his attention.

my husband and I recognized that he had poor language, and that he was lagging behind in his large motor abilities." Ricky's father, a research scientist, shared his wife's concerns.

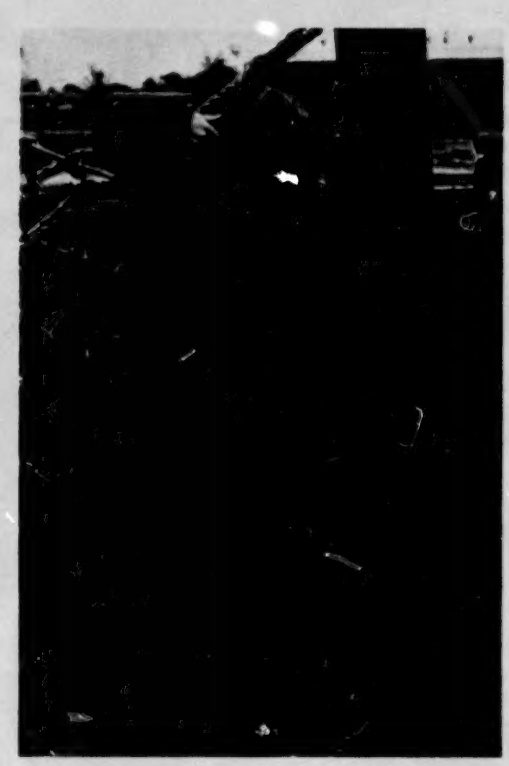
Ricky underwent extensive medical tests. "He seemed to have trouble breathing," said his mother, "and was very nasalized." Large adenoids were considered a potential problem, but on balance Ricky checked out as physically sound. "There seemed to be no physical problem hampering his ability to learn," his mother said.

But there was no question that Ricky's speech was unclear, and that his vocabulary was limited. The medical view was that Ricky was a "slow starter," who could be expected to blossom in one rapid spurt at some unpredictable date.

Dissatisfied with that prognosis, Mary Lou searched out a speech therapy program for pre-schoolers in a New Haven college, staffed by graduate students. Ricky spent a half-hour there each week, and after six months, said his mother, "I was convinced we weren't getting to the root of the problem."

For concerned parents, these days, weeks and months of searching are among the most

A confined space gives structure to Elaine's task.



Glen learns judgement in space on outside climbers.

trying times. "My husband and I felt we were giving Ricky so much time and so much love and patience, and still we were not seeing the change or growth that we wanted to see. The incredibly frustrating thing is that we simply didn't know what to do about it."

Admitting she was "becoming frantic," Mary Lou called the School Board in her home town of Cheshire, Conn., to talk about her four-year-old son. Soon Ricky was being tested by the school psychologist, and subsequently he was enrolled in the year-old Cheshire program called "Parental Pre-school Approach to Early Intervention of Learning Disabilities." It was the fall of 1973. Mother became a member of the class, too, as we shall see.

Ricky, again representative of the "LD child," proved to have above-average intelligence when tested on the Stanford-Binet Intelligence Scale, but multiple difficulties in virtually every other area. On the Gesell Developmental Test, Ricky at four registered a developmental age of 2.9 years. (For further details on testing, see Evaluation, page 52). His gross motor abilities, so troubling to the parents who longed to see their son run and

Shape of the working space helps create boundaries for Teddy, right, and other children.

jump like other exuberant children, indeed tested out at an extremely low level – but Ricky's fine motor skills were very near his age level. And socialization and communication were real problems for the boy as he entered the new Cheshire program. He also proved to have a visual problem which was later corrected with beneficial results.

Despite Ricky's intelligence and other strengths, his mother is probably correct in believing his speech difficulties, poor-self-image and awkwardness would have defeated him in an attempt to function well in a traditional kindergarten setting. He might well have become one of those thousands upon thousands of children who find education a negative experience, a never-ending series of wearying frustrations and incomprehensible exhortations which they hasten to leave at the earliest possible date. In fact, some experts believe, there are as many as eight million Rickys in this country – some say ten per cent of all preadolescent students have some type of learning problem which would respond to proper diagnosis and special programming.

There are many different forms of learning problems – more than 100, according to the National Institute of Health – and concern is being expressed by some who sense a "runaway syndrome" with new learning disabilities being identified, described and programed for with disturbing frequency.

Without gainsaying the lively discussion of the learning disabilities movement within professional circles, it is true to say that many children are not learning in a traditional way by traditional methods in a traditional setting.

Mrs. Gwynette Caruthers, Cheshire's school psychologist and director of the pre-school program, can give countless examples to support that view.

There was one youngster who, it was discovered, could not distinguish the difference between the sounds "a" and "e," a problem inhibiting his ability to read.

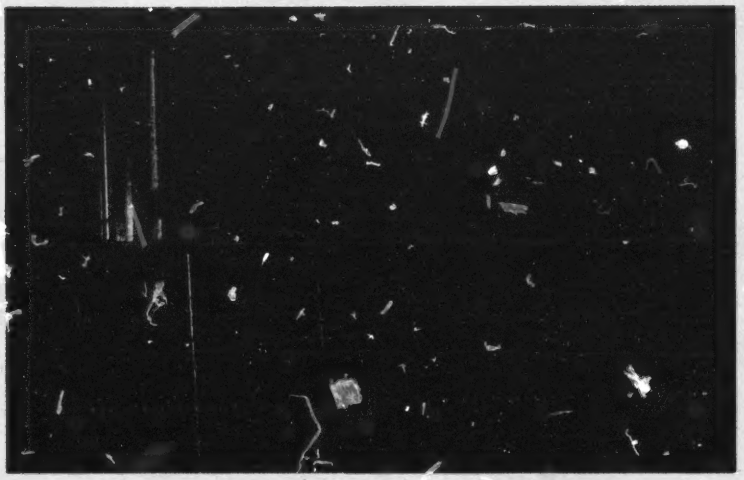
Interestingly enough, upon checking it was found that his mother could not make the auditory distinction, either – but she had managed to compensate for the problem years before.

"In this instance the key was awareness," said Mrs. Caruthers. "When mother and child learned the nature of the problem, it soon receded in importance and the youngster was well on the way to reading." In junior high he was on the honor roll in an average division.

Another child, born without a rectum, was observed using only the right side of his body when jumping and in other activities. After several days of careful evaluation, this characteristic was pointed out to the child's mother, a bright, alert, concerned parent. But even after a period of extensive observation of her child through a one-way mirror, the mother could still not distinguish the unusual behavior pattern. It took four months for her to become aware of the nature of her son's problem – and with that awareness came a giant thrust forward in helping the child.

Concern for these kinds of problems which many think bear on a child's ability to learn have been expressed nationally for a decade or more. In the search for clues to learning difficulties have come a host of labels, some descriptive, some conflicting, more than a few obfuscating: perceptual handicap, brain injury, conceptual handicap, congenital word blindness, minimal brain dysfunction, neuro-

Game extended by Carrie's mother, Kathleen, helps Carrie and Irva work cooperatively and strengthen social skills.



Project Director Gwynette Caruthers works with a mother in the observation room.

phrenia, dyslexia, hyperkinetic impulse disorder, developmental aphasia, psychoneurologic learning disorder, attention disorder, hyperexcitability syndrome.

While these are all interesting terms, many with varying interpretations, it is fair to say that for all learning disabled children, something is amiss with their basic information system: with the way they take in information; with the way they interpret it and relate to it; with the way they respond to it; or with some combination of these three processes.

The problems may, of course, vary in severity. Other learning handicaps may be medically based, such as visual or hearing deficits. But for most learning disabled children, the problem lies not in the senses, but in how their brain perceives impulses.

Some of the more common ways the learning disabled child may run into educational difficulties include:

Reading. The child having problems with visual and/or auditory discrimination, or with visual and auditory memory, usually does not learn to read along with his peers. He may perceive letters backwards or upside down, be unable to retain sequence, or have other similar problems described in the literature.

Language and writing. These same difficulties of discrimination, memory, sequencing, and spatial or directional orientation impose grave hardships on the child struggling to write letters or repeat sounds.

Concepts and abstractions. Some children are slow to grasp the relationship between similar objects (car, truck, bike), although they may be able to identify the objects individually. Others are puzzled by space, time and direction, confusing "above" and "below," "near" and "far," "more" and "less."

Behavior. The hyperactive child often cannot perform a simple but critically important function necessary to meaningful learning: attend to a single task by screening out surrounding distractions. Without this filtering mechanism, the hyperactive youngster is literally overwhelmed by stimuli during every waking moment. Little wonder that his attention span is so short and his energies so prodigious.

As has been suggested, the range of identified learning problems is great and still growing. The area of commonality is that they all, each and every one, bear in some direct, important way on one or more of these basic learning processes: reading, language development and writing, concepts and abstractions.

It has been a decade or more since educators nationally began expressing deep concern about the child with normal or better intelligence who, for some often subtle reason, is inhibited in his ability to learn.

The concern for this same child has been equally intense in the Cheshire, Conn., system for this period of time or longer.

Early in the 1960s, emphasis in the lower grades of the Cheshire system began to shift from grouping children by chronological age to concern for developmental and behavioral placement.

The Gesell Developmental Examination has been administered town-wide since 1968 — with remarkably consistent results. Each year, 30 of the 400 incoming five-year-olds have revealed predictable learning disabilities.

Since 1969, mothers of children (age 7

through 10) with special needs have been attending school along with their children two to four hours per week to gain a better understanding of their children's learning behavior. The results have been positive: improved school performance for the children, increased awareness for the parents.

This effort was begun with Title III, ESEA funding as a Developmental Resource Center project — which in a five-year period has engaged 350 mothers in cooperative learning activities with their children.

The underpinnings of today's pre-school program were thus set in place over a number of years.

Personalities inevitably played a crucial role in formulating the end product.

The pre-school program's head teacher, Lois Rho, and the school psychologist, Gwynette Caruthers, came to believe a decade ago that they would never deal with the learning disabled child with a high degree of effectiveness unless and until they got the child's parent involved in the learning process. As ideas for the pre-school program were refined, both considered intensive parental involvement a cardinal element.

Consultants entered into program planning in different ways.

At one point, Cheshire's School Superintendent, Dr. Stephen August, asked Mrs. Caruthers to search for a common denominator among the one-third of the children who, in annual testing, demonstrated perceptual deviations. At the time, all of these children shared only one thing: they could all be expected to do less-well in school. They were the children consistently identified by teachers as underachievers, most hyperactive or most withdrawn.

Seeking better educational footing, Mrs. Caruthers consulted with Dr. John Streff, then Director of Visual Training for the Gesell Institute of Child Development in New Haven. Could visual problems be the root cause for these learning and behavior problems? Perhaps, concluded Dr. Streff, one of four of the children could benefit from having glasses — but he felt that *all* could benefit from visual training.

Soon Dr. Streff was in Cheshire talking with parents and teachers about conceptual development through physical movement. And another element in today's pre-school program began to take shape.

A chance meeting on a plane was the beginning of Cheshire's innovative experiments with classroom space. A young Cheshire teacher was flying south on vacation, when the unoccupied seat next to her was filled by a handsome, curious young man. She, it turned out, taught a Readiness class — a new term to the gentleman. And he was Felix Drury, then a professor of architecture in the Yale Graduate School of Art and Architecture, a restless spirit who, he admitted, was singularly unimpressed with most school architecture, considering it stultifying and inhibiting in the learning process.

Softness and responsiveness of rope makes it especially appealing to children.

Some months later, Felix Drury's curious mind drew him to Cheshire, so that he might learn more about "Readiness" education. He met Stephen August. He met John Streff, Gwynette Caruthers, and other dedicated teachers seeking better ways to reach children.

Within a short time, Mr. Drury had fashioned a course for his Yale graduate students in classroom architecture, and they were spending two full days a week in Cheshire, serving as aides, relating to children and teachers, attempting to identify those modifications in a child's environment which might

stimulate and enhance the learning process.

Dr. Robert Adams, Director of the Waterbury Child Guidance Clinic, had been a psychiatric consultant to the Cheshire school system for some years. Now an articulate spokesman for the pre-school program, he was initially wary – if not openly opposed – about a plan which would involve parents in the educational process on a day-to-day basis. But he watched, listened, made his own invaluable contribution – and became a convert.

Finally the elements were all in place, the creative energies were all focussed, for a critically important effort: to reach out to the potentially learning handicapped youngster well before he entered the public school setting. Again funding came from the Federal Title III program, for an innovative pre-school plan with these central features:

1) It is limited to children who are identified as having *predictable* learning handicaps which will affect their ability to acquire basic and fundamental learning skills.

2) It fully utilizes the enormous resource of a parent's knowledge about and sensitivity to her own child by bringing the mother into the classroom. Working with a highly sophisticated and deeply committed staff, she is taught to explore her child's unusual approach to learning in a creative and productive way.

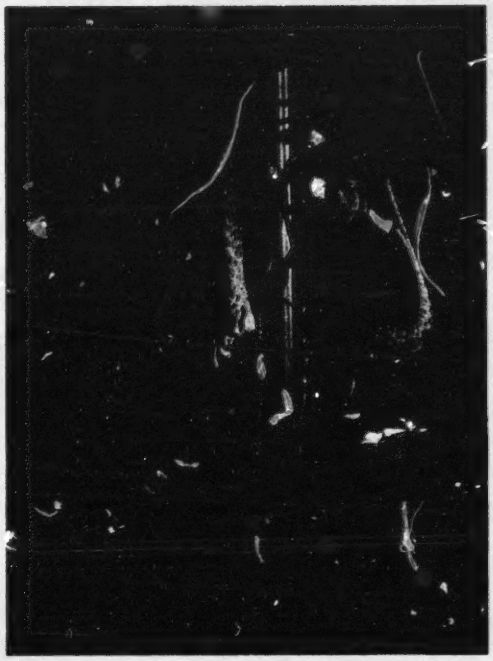
3) Exciting, innovative modifications in the learning environment are carefully designed to meet the children's special needs.

4) Finally, the program relies on expert consultants to further strengthen its concepts and techniques, in full recognition that the program is a process rather than a package, and as such is subject to constant revision, ongoing evaluation, and never-ending dialogue in what one teacher aptly called "a symphony of learning."

It is, above all, a team approach – with mother as a full member of the team. That is an elusive fact which may escape the one-time visitor in the observation booth, who may, understandably, be fascinated by some more visible program component.

But it is the team approach which is at the heart of the effort – and it is an approach which works. Head teacher Lois Rho, with many years' experience in early childhood education, sums up the problems and the potential in this learning methodology:

"We think our team approach to the learning experience – with parents as full, participating members of the team – is exciting, rich, dynamic. But there are continuous hurdles.



"We must, first and foremost, have the ability to share. We can't be protective of whatever we are, whatever we have, but rather we must be willing to give professionally and personally. Each of us has his or her own style, and we must respect that style in one another, so that when we come together we are working from a base of mutual acceptance. The goal is the program – to make it really work. In the process, you learn a lot about yourself, and some of it is painful. You have to work with a sense of trust, and not for a moment be in it for yourself.

"But the rewards are so great, personally, professionally, and most of all as a team."

In 1972, a planning year, the program enrolled six children and six mothers. In 1974-75, the total had swelled to 26 children, occupying two large classrooms in the kindergarten wing of Cheshire's Highland School. Twenty-six children. Twenty-six mothers. Twenty-six mother-child relationships. Two special education teachers. One teacher supervisor. And the support staff – consultants, school psychologist, social worker.

All coming together in an intricate, meaningful, rewarding "symphony of learning."

This booklet describes the symphony in its most important parts, in the hope that, seen whole, the harmony of the design shines through.

mothers & their children

THE NINE PROGRAM MOTHERS WERE deeply engrossed in a conversation about their children. The shared deep concern for the special needs of one child emerged as a common bond of near-visible force in drawing the mothers together.

Without Cheshire's pre-school program, they agreed, several of the youngsters would now be in "outside placement," a pleasant euphemism for a highly structured environment, with segregation by the nature of the disability. Others could look forward only to special education programs in self-contained classrooms. Still others would drift into the educational "mainstream" and, most likely, be early drop-outs from the educational experience.

As the far-ranging conversation continued, a central program precept emerged with startling clarity: the Cheshire program, in the most fundamental sense, really *is* the Mother, and Mother is the program.

No question that the highly skilled professional has a vital role to play, as do the support staff: they are collectively the catalyst which makes it all work.

And yet the entire process, stripped to its most important element, is mother-child, child-mother. For several reasons which the mothers made clear.

First, mother is a child's first and potentially best teacher. There is no way to instill in any other teacher her special knowledge about and sensitivity to her child. Secondly, the preschool program recognizes that success with these special children requires a total effort; that the youngsters must be enveloped in an atmosphere and a carefully designed environment during every waking moment. Only the mother can carry that atmosphere and environment into the home.

Finally, it is true to say that in many instances a learning problem resides not in child alone, not in mother alone, but in some shared way. Mothers can, and often do, benefit as much from this program as do their children.

Because their role is crucial, because they are in fact the program, it is valuable to share the mothers' insights. How do they perceive what is happening to them and to their children? What do they recognize as the program's strengths – and its weaknesses?

As the nine mothers talked, these and other topics were discussed with the candor which is characteristic (and essential) in all mother-staff, mother-mother, mother-child relationships in the program.

Participants were:

Margaret, mother of Beth, a late-speaking child with poor motor abilities.

Mary, mother of Michael, a graduate of the program; and of Jonathan, a disoriented youngster, with information-sorting difficulties.

Jackie, Brett's mother. He's a bright little boy who had no language at the age of 4.

Sheila, Teddy's mother, now a program aide. Teddy has cerebral palsy, and came into the program with virtually no language.

Claire, mother of twin boys, Jon and James, hyperactive children with speech problems.

Mary Lou, a teacher and Ricky's mother.

Linda, Brianna's mother. Brianna has severe visual problems and frequent tantrums.

Kathleen, mother of Carrie. Carrie is a very active little girl who has made many trips to the hospital.

And *Joan*, mother of the hyperactive Bobby.

HOW DID YOU PERCEIVE YOUR CHILD'S PROBLEM WHEN YOU MADE

THE DECISION TO ENTER THIS PROGRAM?

Jackie: Brett was four, and he still wasn't talking. He was a very easy-going, happy child, but I began to sense his frustration because he couldn't communicate with us. When the whole family was out riding in the car, we'd play guessing games with Brett. He'd say something which wasn't distinguishable at all, and we'd all say, "Do you mean this?" or "Do you mean that?" And you could see the frustration in him because he couldn't express what he was feeling.

He had gone to nursery school for a year, and people there told me he was fine. And our pediatrician said the same thing — he's fine. Perhaps it was mother's instinct, but I knew something wasn't right.

Then I received a letter from the school, and one of the things mentioned was trauma in a child's life. Brett at 2½ had been rushed into the hospital emergency room and was close to death. He had to have a tracheotomy. The only word he could say up to that time was "cookie." But the doctors said this experience had no effect on his speech.

It's only been in this past year that Brett's begun verbalizing about the hospital, and about how much he hated it. Now he's able to talk about the experience he had two years ago. It was a very traumatic experience, for him and the whole family.

Margaret: I read about the program in the local paper, the day before the deadline for registration. To that point, I had taken Beth to a pediatrician a number of times, without satisfaction. He kept trying to reassure me that Beth was just a slow starter, and that she'd come along like our other children had. One of our boys had been a late talker, and he bloomed all at once. But he too could have benefitted from this kind of program.

Because of the uniqueness of the mother-child relationship, I think the mother experiences special anxieties and frustrations when she senses a problem in her child.

There were problems beyond the language deficit, though. When Beth first came into the program, she obviously had inner fears. She wouldn't get up on a climbing board and go across it. A big part of my job in working with her is to give her a sense of security.

WHAT WAS YOUR ATTITUDE TOWARD YOUR CHILD AS YOU CAME INTO THE PROGRAM?

Linda: I felt either I was going to be committed, or need psychiatric help. It isn't Brianna's tantrums, the crying and screaming, that bother me. It's the complete frustration of not knowing how to reach her, to help her, to change her behavior. I wasn't able to find alternative ways to modify her behavior, and frankly, I was almost at the breaking point.

Kathleen: I was very frustrated, too. I have two other children at home, and they kept asking, "What's wrong with Carrie? Why isn't she talking?" This kind of peer pressure, from my own kids and from neighborhood kids, as well as from my friends, was difficult to handle. When we first entered the program, I think Mother needed help more than the child. I was trying to draw words out of Carrie, and it just wasn't working.

Sheila: Before this program, I was very nervous with Teddy, and very depressed and confused. I suspect that didn't help him very much. The program has helped me put things in proper perspective.

Claire: There were times when I was very happy with my twins, and other times when I said, "Why did this happen to me, at my age, to have twins who seem to be hyperactive?" But then I thought, maybe they're really not hyperactive — maybe it's just because there are two of them. I didn't see this program as an end to that sort of thing, but actually it has calmed them down a lot. Mostly it's taught me how to do things effectively with them at home.

Jackie: I think I was beginning not to like Brett. I was embarrassed by him, and he was doing things I didn't understand. If we were in a supermarket or any place where there were other children, he'd run up to them and go "Grrrr!!" — like a monster. And I'd think, Oh dear God, why this? I didn't realize this was his only way of communicating with other children.

HOW DO YOU PERCEIVE YOUR OWN ROLE IN THIS PROGRAM?

Kathleen: It's very important for the mother and child to be together in the classroom, but it's just as important that the same principles apply at home. Otherwise, it's self-defeating. You get very close to your child when you're involved with her in the classroom. Carrie looks forward to the time we spend here — and so do I.

Mary Lou: The mother's role is a vital part of the program. Ricky in the beginning needed

Margaret, mother of Beth.

Jackie, Brett's mother.

my support. I had to be there in order for him to be comfortable, and to help him relate to this whole new situation and other people. I don't think he could have done it without me. And it's got to be long-term, because the children are always changing, the activities and the space are always changing, and most of all, because you have to carry home what you're learning on a day-to-day basis – to the father and the rest of the family.

Mary: I enjoy working with all of the children a great deal, and I have a tendency to go to the child who needs the most help. To try to get things going for her. But Jonathan resents it if I spend too much time with others, so I have to handle this carefully.

Sheila: Unless the mothers can contribute everything they know about their child, this would be a very clinical experience. The fact is, no one knows a child like his mother.

Margaret: Mother is the bridge between home and school. Before this program, all of us at home were trying to stimulate her language in different ways. Now, with the knowledge I bring home from the program for all of us, we're all approaching Beth in a pretty coordinated way.

Mary: There's great value, too, in mothers talking to other mothers. You get support and encouragement, and you learn more about your own child by watching other children. All of us, in the beginning, had this terrible feeling of isolation and aloneness. All of us, I'm sure, felt we were the only ones experiencing these kinds of problems with our kids.

HOW HAVE YOUR LIVES BEEN CHANGED BY THE PROGRAM?

Margaret: It's made me more aware of Beth's needs. Outwardly, at first, we were just concerned about language problems, but deep down I knew there were motor difficulties, too. It's had an effect on the kinds of toys we get for Beth, the kind of activities we structure for her. It's given our whole family more patience and more tolerance.

Jackie: Especially patience. The staff made me aware, in a very nice way, that I have a tendency to rattle off 21 instructions to Brett

in less than a minute before he's even grasping the first one. It's helped slow me down, and I've had to modify my ways a lot. And it has reached way out. My friends who know that Brett is in the program are much more considerate of him now. They take the time to listen to him. Many have come here to see the room.

Joan: I was too permissive. I had to learn how to be more organized, more structured. When we first came to the program, Bobby could practically climb a wall without reprimand. It was just not my nature to be authoritarian. I devoted far too much time to Bobby, taking it away from the rest of the family and myself, too. Bobby always came first.

But he gained so phenomenally in the first few months of the program last year that it was unbelievable. Prior to that, it was just about impossible to live with this child. You'd never dream of having company. Now we can structure his activities, and he's a different person.

Mary: I changed. I probably have lots more patience, and I'm much more open than I was before. Now I don't get terribly rattled if I'm baking and the flour gets spilled. Before, I wouldn't even let my children in the kitchen. I had six children in 10 years. I love coming to school, it gives me two hours with my one child. It creates a wonderful feeling of closeness. And you change as a person.

Linda: School is my quiet time. It's therapy for me. I have patience with Brianna at home, but here there's help when I need it. As a result of the program, I'm in much better shape emotionally and physically.

Mary Lou: The program has taught me to slow down. It has allowed me to do more things with my children. For example, a few years ago I wouldn't have dreamed of having a small pool filled with water in my kitchen, as I did this winter. The value of it for the kids never would have occurred to me. I would simply have said no.

This experience has made my husband and me focus more on the positive aspects of our children, on their specialness. Not that we didn't think they were special before, but I believe we were concentrating too much on their problems and their weak areas. When you do focus on the positive, very special things about your children, it does wonders for them. And I can relate that to myself, as well.

Kathleen: The program has affected me more at home than anywhere else. We have a hyperactive nine-year-old, in addition to Carrie, and I've gained a lot of insight into his problems through this program. It's helped my husband and me just to sit down and talk about the children. That was very difficult for us before, and now it seems that's all we do.

WHAT DO YOU FEEL IS THE SINGLE GREATEST BENEFIT YOUR CHILD IS GETTING FROM THIS PROGRAM?

Margaret: Confidence in herself. When Beth first entered the space, she was a frightened child. She would tremble if it was suggested that she climb, and she wouldn't take a step off the floor without being very conscious of the danger of falling. This staff has an incredible ability to introduce a material at just the right instant — at a time when the child will respond to it, and learn from it.

After three months, it's a joy to me to see Beth climb right up to the ceiling. No matter what kind of climbers are in the room now, she just takes off her shoes and tackles them.

Jackie: I agree, self-confidence. But not for Brett, in climbing, but in communicating his feelings. A year ago, I simply couldn't take Brett into any setting where there were other children, without risking chaos. But just last week, we were in a plant shop, of all places. And there were six other children in there at the same time. A year ago, I simply wouldn't have taken Brett in there. But he went around to each of the children, and I must say he was the best-behaved child there. He went around and said, "Hi. I'm Brett and I'm five. How old are you?" And I just puffed up with pride. I've learned to respect him as an individual now.

Finally, as a result of this program, I'm communicating with my 13-year-old. If I had this when he was little, how much easier it would have been to bring him up.

Sheila: For Teddy — yes, I agree, self-confidence.

Joan: Bobby has learned to work outside of his home, with people around, without getting so distracted that he can do nothing. If you see him with other children who do not have problems, and who are not part of this program, of his same age, you will find Bobby acting so much more maturely in many areas, even with his hyperactivity.

Mary: The single greatest benefit for my child? Me. When I was here with Michael,

Linda, Brianna's mother.

Kathleen, mother of Carrie.

Jonathan spent many hours with a sitter. He liked her, but it wasn't being with mother. Now he has me exclusively for a certain time every day.

Linda: Brianna has gotten two important things out of the program, in a short time. First, help with her vision. John Streff (visual/perception consultant) helped me understand about her tunnel vision. And we're working with equipment and activities to bring her out of this. As this situation improves, there's noticeably less frustration, and therefore fewer tantrums. Now, at times, instead of screaming for something or about something, she'll talk about it. That's a terrific improvement.

Kathleen: Yes, self-confidence has been important for Carrie. It's been especially helpful for her to come into contact with the other mothers, the other adults in the program. She had a lot of difficulty relating to adults before.

WHAT IS THE PROGRAM'S MOST SIGNIFICANT WEAKNESS?

Margaret: It's too small, and not sufficiently well-known. It needs to reach many more children.

Sheila: I think we need even more help from consultants. There should be a bridge between the educational program here and the medical aspects of a child's problem. When it exists now, it's apt to exist in an informal way. For example, I think the program needs a developmental pediatrician as a consultant. And we could use more extensive services from a speech therapist.

Kathleen: I think there's a need, too, for a formal follow-up program as the children leave the program and go on into kindergarten. Even those who have made great progress here may still need a lot of support. There's a good deal of follow-up now, but I think it needs to be formalized into a permanent program.

DO YOU SENSE AN INHERENT DIFFICULTY IN REPLICATING THIS KIND OF PROGRAM ON A BROADER BASIS, OR IN OTHER SCHOOLS?

Joan: Sure, it's expensive. But if you don't spend the money now, you're going to have

Sheila, Teddy's mother.

Claire, mother of the twins, Jon and James.

to spend it later – and perhaps much more. It's very cute to take a three-year-old to the public library, and have him climb up to the ceiling on the side of book-cases. Everyone looks and smiles, and mother is frantic. If that child comes to school and he can climb, and it's legal – like it is in this program – that's helpful. But if it isn't, and he starts climbing on top of school buildings, he becomes a little menace. Sooner or later, someone's going to have to pay for his care.

It's hard to get people to endorse preventive measures. And I'm speaking not just in terms of the kid who's destructive to society. If he's doing absolutely nothing, just sitting there, he may still have to be placed in a very expensive setting later on.

I really feel if I could have had this kind of support from the time Bobby was born, he wouldn't need this program today. He would have outgrown it. I could have been helped right from the beginning, and there's no one else to do it but the educators. That kind of help doesn't come from the medical profession. It's got to come out of the school system.

WHERE DO YOU FEEL YOUR CHILD WOULD BE RIGHT NOW, SOCIALLY, EMOTIONALLY, DEVELOPMENTALLY, IF HE OR SHE WASN'T IN THIS PROGRAM?

Margaret: I think Beth would still be talking in phrases rather than in sentences, and I don't think she'd be doing these other activities, such as climbing, at all. I'm not sure we would have made any progress in dealing with her inner fears, and her poor self-image.

Jackie: Brett would be in kindergarten. I don't know what his language development would be, but I'm sure he'd be very active, perhaps even destructive, and a not-very-well-put-together kid. I think he would be considered a problem kindergartener, and I would be a nervous wreck.

Joan: Bobby is a December baby, and would probably have been in kindergarten this year. Yes, he would probably be in kindergarten, with one or two aides to drag him out of the classroom every time he became too difficult to handle. And probably no one would understand the nature of his problem, and next year we'd be looking forward to

Mary, mother of Michael and Jonathan.

asthma and several other things which usually crop up in first grade with kids like this. The whole situation would be just a mess, Bobby wouldn't understand what was happening to him, and no one else would understand, either. And as he got older, the situation would have gotten worse.

Mary: Michael would probably be in kindergarten, where he is now, but he'd be in a corner, doing absolutely nothing. There would be no social contact at all. But not long ago his kindergarten teacher told me how pleased she was, because there was a little girl in the class who hadn't talked for two weeks, and Michael got her to talk.

Linda: Brianna would still be banging into walls, tripping over things, running everywhere very quickly. Not learning to slow down as she's doing now. And she'd probably be under the care of a child psychologist, because I didn't know what to do with her. And I'd probably be physically and mentally exhausted.

HOW HAS YOUR ATTITUDE TOWARD PUBLIC EDUCATION BEEN AFFECTED BY THIS PROGRAM?

Jackie: I think there's too little communication between school and parent until it's almost too late. The tendency is to wait until a problem is severe before involving the parent. This program has made my husband and me *so* aware of everything going on in the schools, and we want to be right on top of it.

Margaret: This program has made me aware of the special needs in public education. I cannot imagine what it would be like for any of these children entering a regimented kindergarten without having had the benefit of this type of exposure first.

Joan: I was brought up in a very strict home, and I've always been in awe of any kind of authority and I expect I'll carry that with me until the day I die.

One great thing about this staff is that they don't pretend to be gods. They actively seek out my opinion on what's best for my child, and they admit they don't always know what to do. So I'm beginning to find out that my

Mary Lou, Ricky's mother.

ideas are pretty good, too – and I'm going to make my presence felt more in the schools. I have a 14-year-old daughter who has suffered along the way several times because of my reluctance to get involved, of being afraid to question things.

I believe if 50 per cent of the parents could be exposed to this program experience, it would revolutionize education – very much for the better.

WOULD THIS KIND OF PROGRAM BE BENEFICIAL TO ALL CHILDREN IN THE LOWER GRADES, WHETHER THEY HAD A LEARNING PROBLEM OR NOT?

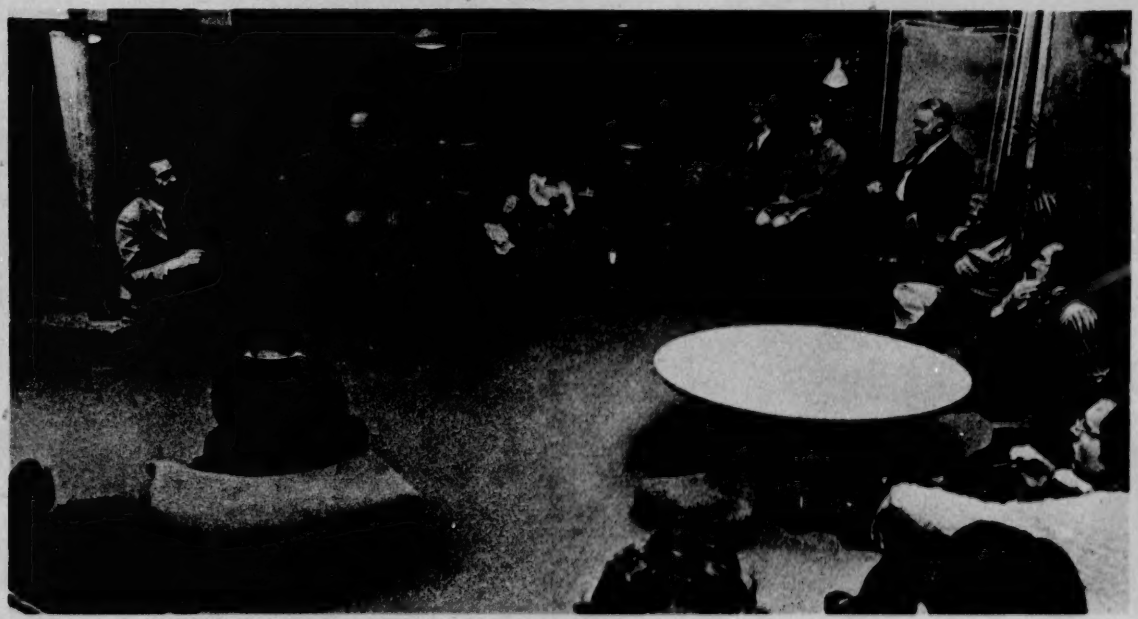
Sheila: It would be a tremendous experience for all children, perhaps through the third grade level. I think we'd see potential in children we don't even dream exists now. And this is the kind of program mothers would fight for, and support financially and in any other way.

* * * * *

As the conversation continued, Claire again mentioned to the mothers how difficult it was for her to get her three-year-old twins, Jon and James, to school on time. With five children, her mornings are hectic.

But no matter that they are a little late. When the twins enter the space, the program process for them begins anew, as we shall see in the unfolding of a typical pre-school day.

Joan, Bobby's mother.



Dr. John Streff fields questions from the parents in one of the evening informational sessions held regularly.

tuesday november 12

Brian sits with pride atop the world he has created.

BRIAN, EMMA AND HARDIN WERE totally absorbed as their elaborate home took shape.

With their mothers, they had arrived a bit early on this Tuesday morning.

"Brian seems more settled," commented Diane Gamble, the classroom teacher, to her aide, Pat Foley, as both watched the large cardboard blocks being stacked into place. "Yesterday was not one of his better days."

"We need beds! Beds!" shouted Brian, as the walls of the house went up. Hardin's mother, Carolyn, left the play to find a mat, an excellent bed in a pretend world.

"And pots for the kitchen!" said Hardin in her tiny voice. Elaine, Emma's mother, began looking for toy pots and pans.

The roof on the cardboard structure was nearly done as the twins arrived, dashing through the tower, James first, Jon close behind, radiating energy and excitement.

"It's me! It's me!" shouted James.

"Brian! Brian!" chorused Jon. Brian was their favorite, the focus of their in-school attention and affection. Which is difficult for Brian; he has had little experience with other children.

The house was a masterpiece, nearly done, and the twins wanted to share in the play.

"No! You can't come in! This is my house!

I don't want you in here!" Brian, petulant, not fully recovered from his blue Monday.

The twins seemed unabashed.

Diane, the teacher, mastering the art of subtle structuring: "Why don't you build a house over here? You can be Brian's next door neighbor!"

But the location was wrong, Diane sensed immediately. The blocks were in the hallway; to get "next door" to Brian, the twins would have to carry them through a climber. Especially difficult for Jon.

"No, it would actually be better over here – you'll be able to see Brian better." A direct path to the blocks was opened.

Claire, the twins' mother, smiling as always, was a little unsure of how to begin.

The boys made several trips, and the pile of wooden blocks began to build. Diane began to make a wall. Claire helped. Soon both boys were as engrossed as their neighbors in building their house.

Judy and her mother, Vi, had been reading quietly in the little space set off from the main room. Now Judy got interested in helping the twins. They welcomed her.

"We need a telephone!" said James, as the wood house neared completion.

"Yes! Us, too!" from Brian, his exuberant mood restored.

"Alright. When we finish," said Diane. "But we'll have to take orders for them. I'll have my assistant do that."

Hardin's mother, Carolyn, picked up on the dramatic play immediately.

With a small pad and pencil in hand, she approached Brian's house.

"You would like to order a telephone, Sir?"

"Yes."

"And what is your name? Your address? And what color phone would you like?"

While Carolyn approached Jon and James for the same information, Diane was busily looking for telephones. She found one quickly, borrowed another from the nearby kindergarten room.

How to give them permanence within the play, so one youngster would not simply claim a telephone and walk off with it? A small rope – the telephone's cord – proved to be the answer.

Soon Carolyn shifted roles from order-taker to telephone installer.

"And where would you like this phone, sir?"

Lois Rho entered the space, leaving Jake Foley to work with the four-year-olds in the next room. A simple signal from Diane. Interesting play taking place. Lois nodded, and slipped into the observation booth. Brian's mother, Neen, and Emma's mother, Elaine, followed her there. They had asked for an observation period earlier.

"We need a mailman," said Claire.

"Great idea! I'll get a mailbag," said Diane. "Jon, you can be the mailman."

Meanwhile, James was testing his phone. "Brian? This is James. Can I come over tomorrow?"

But it was Hardin on the line.

"Hi, honey. I won't be home for dinner tonight. Have to go out for a meeting. No, I can't take the children. They can come dancing, but not to my meetings."

Emma is well into the housekeeping role, strutting around Brian's self-claimed domain, hand on hip. "Damn kids, they're always on my nerves. Can't get any of my housework done!"

But Emma was getting tired of keeping house for Brian. She wanted a place of her own, and wandered off to the small space vacated earlier by Judy and her Mom. Soon Hardin followed her.

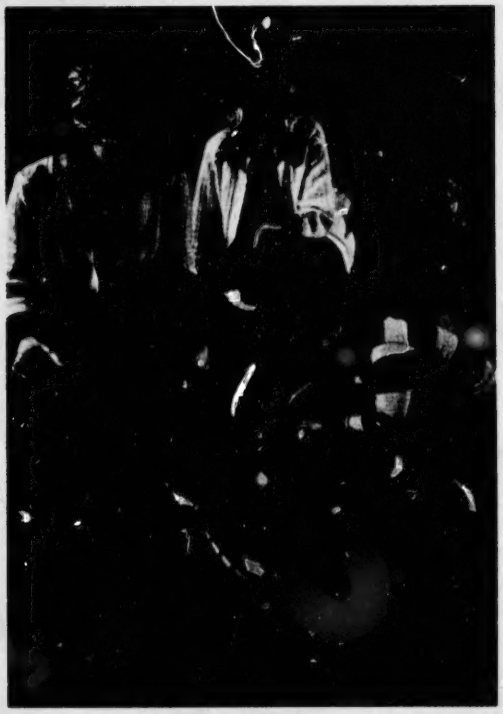
The mailman was busy. Diane was writing a child's name on a piece of paper, and off Jon would go to deliver it. First to Judy, now off in a corner painting, with encouragement from Mom.

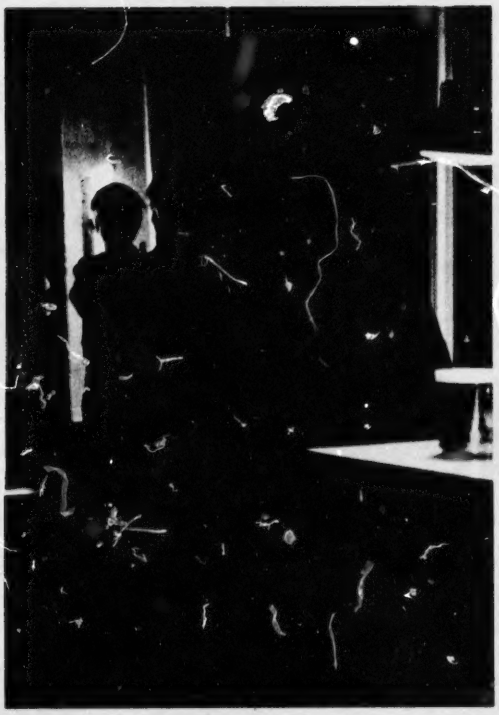
Brandon arrived very late, bringing his father to school for the first time. He was anxious to show him the marble game. And there was mail for Brandon, too. Jon was walking through the space surprisingly well, not tripping, falling and bumping into things as he had earlier.

While lively telephone conversations continued, while mail continued to be delivered, Emma was getting into dress-up in the small room, with Hardin a fascinated observer.

Lois, Neen and Elaine in the observation room were intrigued, able to see and hear the play.

"It's a first," said Elaine, Emma's mother. "They've never been together in play before, just the two of them. And they've put up a screen, a door to their own house." Emma had been having a lot of tantrums in the room. Everyone's goal for her was simply to have some success at whatever she approached.





Diane Gamble and a mother study Mark and Neil's approach to a task, above left. At right, mirrors are invaluable in helping a child discover who he is. Below, with a helping hand from mother, Jon prepares to jump into a pile of pillows. He's facing a mirror while doing so.

Jon came to deliver the mail, pushing against the screen.

"This could be difficult," Lois observed.

Emma and Hardin reacted aggressively.

"Out! Out! This is our house! You have your own house!"

Diane, seemingly ever-present, offered a simple intervention.

"He has mail for you." And she was gone.

Jon became cautious. He pushed the screen a bit more, threw in his letter and left quickly. But he returned later, and the girls welcomed him into their space.

Jon's interest in music is easy to discern.

It was 9:45. Play had centered on the two houses for an exceptional period of time.

Claire put a record on the phonograph; "Change," one of the children's favorites. It starts with a strong calypso beat, then moves subtly into other rhythms.

As always, Jon's reaction was strong and immediate. Music is his first love. He dashed to the basket full of instruments, took out a tambourine and a shaker, and immediately fell into the music's rhythm, swaying and grinning and shaking before the large mirrors. Quickly the other children joined him, getting instruments from Diane. Music time is a favorite time, a happy time, even for those like Brandon who only sit and listen.

An enigmatic quality in Jon shines through at music time. His involvement with the music is total, his sensitivity to complex beats extraordinary in a three-year-old. And yet his motor abilities are seriously limited. On the playground, he's unable to set in motion a small push-pull swing, requiring the simplest coordination and sense of rhythm.

Two records play, and then Diane brings out the autoharp.

"Sing about my dress!"

"Sing about my shirt!"

"Sing about my shoes!"

Diane begins to play and sing.

" . . . Jon is wearing a blue shirt, blue shirt, blue shirt, Jon is wearing a blue shirt, all day long . . . "

More kids, more clothes, set to music.

The children love it. James, lacking his brother's rhythmic talent, is nestled against his mother, sitting on the floor. Claire is tapping the music's beat on his back. And then songs about body parts. Children in front of the mirror. "Close eyes . . . open eyes . . .open mouth . . . close mouth . . . lift leg . . . "

And animal sounds. Some children learning for the first time the unusual things which can be done with a mouth.

Snack time approaching, but first Carolyn leads the children in a few simple dances.

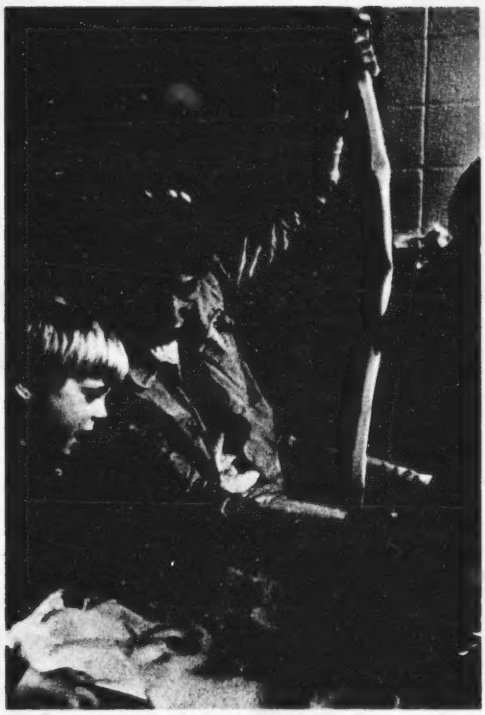
Emma and Judy begin putting paper cups and napkins around the table for the six children. They gather, with Pat, for the social, mid-morning break, chattering in low key. Enjoying juice, raw carrots, fruit. No sweets.

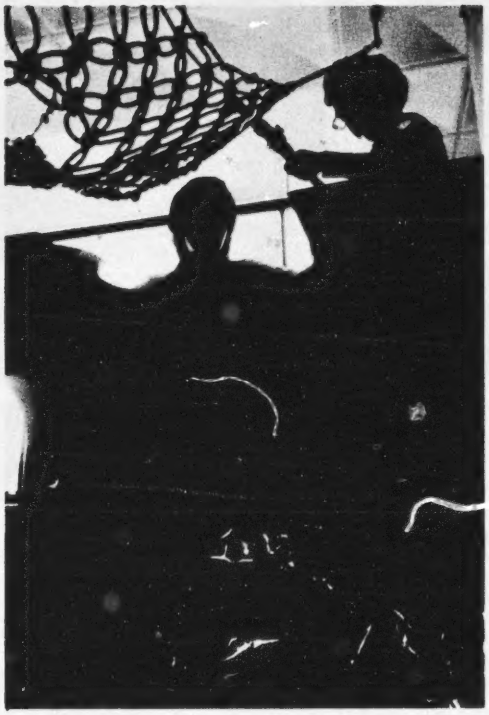
After snack, they'll walk with Pat down by the little pond, and play among the trees. Their school day is coming to an end.

* * * * *

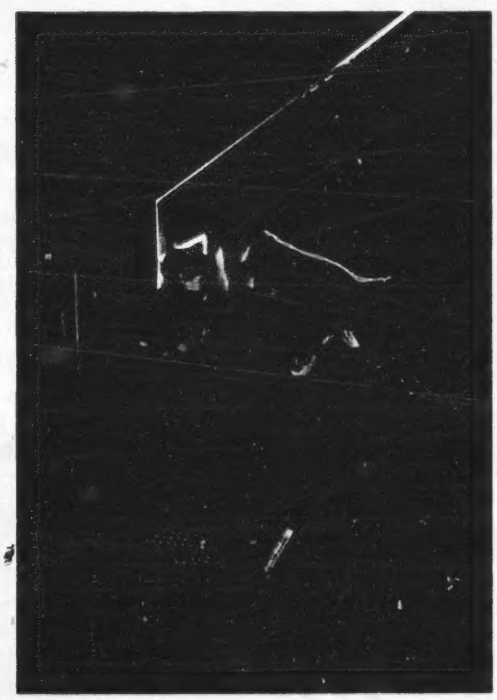
As the six children settled around the table for their snack, their mothers left the space for their daily meeting with Lois Rho, the head teacher, and Diane Gamble, the classroom teacher.

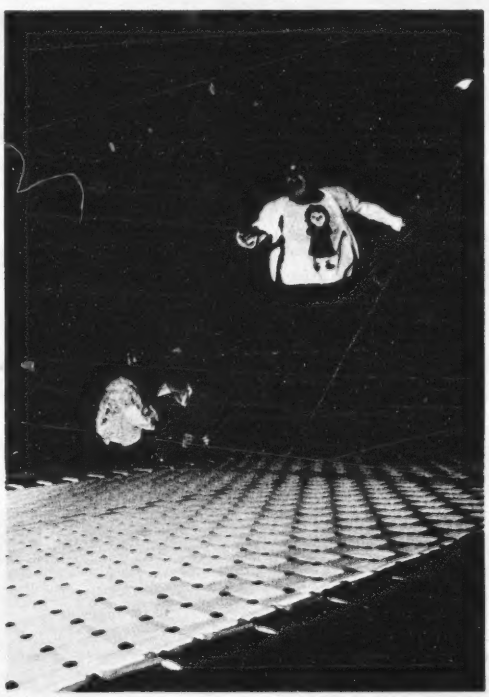
While they gathered in the small conference room, pouring coffee and chatting amiably, Jake Foley was meeting with the parents of his four-year-olds in Highland School's library for the same kind of evaluative session. The daily meetings are recognized as a vitally important part of the program process. Lois, time permitting, would share her insights with





Above left, Mary Ann involves son Steven in a game of visual tracking. Right, Sandy watches as son Mark goes "fishing" — an excellent way to develop eye-hand coordination. Below left, tracing his own shape helps a child zero in on his own identity. Right, sequencing and body balance are important for Emma as she bounces high.





both groups.

As the mothers of the three-year-olds met, Elaine and Carolyn seemed particularly excited – excited about the day's activities for Jon and James. The conversation, extending for nearly an hour, included these comments:

Carolyn: Claire, you ought to be so pleased. The twins had a wonderful day. I see so much progress in both of them.

Claire: James seems much better able to stay with one activity now. Did you notice how long he stayed with the house play, and how long he stayed with the telephone?

Diane: Just a couple of weeks ago, James wouldn't have been able to bring those blocks in from the hallway. He would have become distracted along the way.

Lois: And you know, yesterday, when we opened the doors to room two so the kids could circulate if they wanted to, James spent nearly the entire morning over there.

Claire: Yes, he worked in the sand area for nearly 30 minutes, and then he moved to the table with the small manipulatives and organized the toys quite well. And then at the end of the morning, he went up the climbing equipment of the tower for the first time.

Lois: He acted as if he'd never been up that high. He just watched, and talked about the things he saw. And you know, James is using language much more appropriately now. And he's less aggressive.

Claire: Did I tell you that today, just before snack, James came all the way across the room and said, "I'd like Brian to visit some day."

Lois: That's an indication of tremendous growth, Claire. He had an idea, he was able to hold on to that idea, handle the space and come over to you, without being distracted along the way. Remember, it wasn't very long ago that I had to meet you and the boys when you arrived, and get James off into the small room playing with blocks, just to get him motivated and to get him to focus on one thing. He's come a long way.

Diane: The space just wasn't working well then, for either James or Jon.

Claire: But it seems better now.

Lois: We spent a whole day with Felix Drury, finding ways to completely restructure the room to provide more clearly defined spaces. You're right, it is much better – and not only for James and Jon, but for all the kids.

Diane: How are things at home with the twins, Claire? Are they showing growth there, too?

Claire: You remember I told you about the day the boys went into the upstairs bathroom and poured oil into the light fixtures? That was a low point for me. Now they're settling down a lot, playing with games for fairly lengthy periods.

And I'm becoming more convinced that you were all right about separate identities. They have their own bureaus now, and I think dressing them differently helps. All of us in the house used to think of the twins as one person, I guess.

Lois: Mostly as James.

Claire: Yes, as James. He seems the stronger one, or at least the loudest.

Diane: But Jon doesn't call himself James anymore. He's definitely developing an identity of his own.

Claire: Perhaps the most remarkable thing of all is that I didn't realize much earlier that the twins were having learning problems. I'd always heard that twins develop more slowly than other children, and while they didn't have much language, they seemed to communicate well between themselves. So I wasn't really looking for help.

Neen: What changed your mind?

Claire: Well, I got a letter from the school last spring about this program, and almost every problem area it mentioned seemed to apply to my children. I decided I'd better investigate.

Lois: Do you have an objective in mind for James today?

Claire: I think I'm most concerned about his language, and playing well with other children.

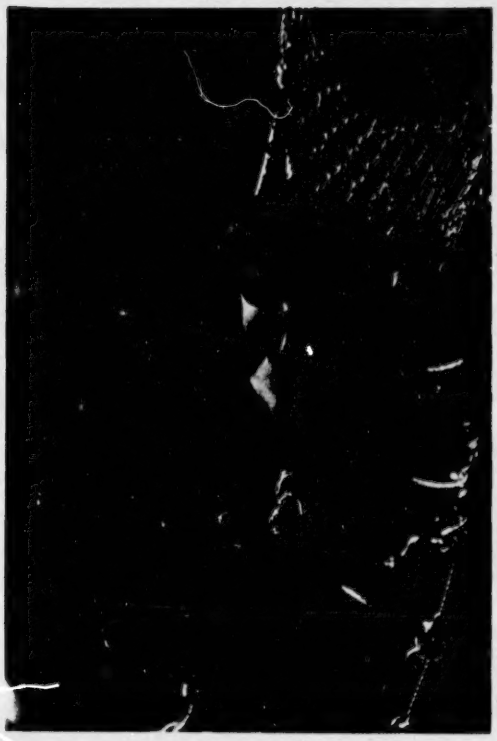
Diane: I agree. And his auditory abilities. I think we should structure some activities for James which will encourage him to use language more extensively. Socialization will come at the same time. Both the twins love all the children.

Lois: Claire, maybe you can involve James with the obstacle course and bead system, part of the cabinets along the wall.

Diane: I'll help you set it up.

Lois: The beads on the wire will give you a chance to do lots of things with him, Claire. See if he'll be interested in changing beads from one cup to the next, and tell you what he's doing. Then you can ask him for a bead of a particular color.

Diane: Or you can ask him to find a bead of the same color as the bead on the wire. Or ask him to do two things in sequence, like pick up



Device above, built especially for Jon, encourages children to use both sides of their body alternately. At right, while resting or playing in this swing made just for her, Brianna's eyes straighten and her temper tantrums recede.

a bead from the cup and then send it down the wire.

Lois: And we can work on his auditory discrimination in the same area.

Claire: How?

Lois: Well, if James gets into that little crawl space under the cabinet, ask him to guess who is walking across above him by the sound of the footsteps. The kids love that game. See if he can tell if it's a child or an adult by the sound of the footsteps, and if they're barefooted or have shoes on. Things like that.

Diane: And reinforce it all with language.

Claire: That sounds like fun.

Diane: It is!

Elaine: You know, Jon handled the space very, very well today.

Claire: He still has a lot of trouble getting around.

Lois: But he's not tripping and falling nearly as much as he did.

Carolyn: Diane, that was a stroke of genius having Jon be the mailman. It really got him out and moving around.

Diane: How can we strengthen it?

Neen: I was thinking perhaps we ought to have pathways, leading from the house to various areas. That might be especially useful to Jon.

Lois: That's a marvelous idea, Neen! He really needs that kind of structuring right now.

Claire: You know I talked with John Streff when he was last here, and he explained about Jon's vision. Dr. Streff said that he sees alright with his right eye, and he sees OK with his left eye, but that he can't converge, bring them together to focus. He's either using one eye or the other all the time, but not both at the same time.

Lois: We're working on some materials right now to deal with that, Claire. We want to extend the sense of convergence to all of his activities.

Claire: Did you notice that the boys didn't have their trucks with them today? Trucks are their favorite thing, but they haven't asked to bring them the last few days.

Diane: I think they were kind of a bridge between home and school. That's probably a sign they're getting more comfortable in the

space. They're using most of the materials, although Jon can't quite make it on the climbers yet. He will, though.

* * * * *

The conversation continued, with Lois describing at length the interaction between Emma and Hardin in the small room, and the way Diane had handled Jon's approach to that play. "It's a very delicate thing, knowing when to intervene and when to let the kids work out something all by themselves. In this instance, Diane provided exactly the right touch to permit the play to continue, without in any sense dominating the situation."

Strategies for all the children were discussed – games to play, materials to use – in the continuing effort to adapt the learning process to the individual child's conception of himself and his surroundings.

It was nearly noon when the mothers left the conference room to pick up their children from Pat.

* * * * *

The noon luncheon meeting for the staff is informal but intense. Often Lois, Diane and Jake are joined by Gwynette Caruthers, the project director, and program consultants over food trays hurriedly brought from the cafeteria. There's so much to say, and so little time.

The conversation extends beyond the needs of a particular child. What is working in the space? What changes need to be made? How is one particular mother handling emotional stress?

There are no written objectives for the mothers, but each member of the staff is keenly aware of the particular needs of each parent. Conversations between staff and parents are exceptionally forthright and direct.

"I don't care if she only comes here and observes," said Lois at one point, as the conflicts of one particular mother were discussed. "The important thing is that she feels she's participating. She'll get into the classroom soon enough, and I just have a hunch she's going to prove to be marvelous working with all the kids."

Nearly 1 p.m. The conversation came to an end, with too many things left unsaid. It would continue late into the day, and spill over into the weekend. It is a never-ending dialogue.

But now it was time to set up for the afternoon groups. Different children, different mothers, different problems. But the process remained the same.

* * * * *

Late afternoon. The mothers have left after their meeting with the staff. Lois is having a quiet cup of coffee with Dr. Robert Adams, the program's consulting psychiatrist.

She is troubled by Jon. There has to be a better way to deal with his unusual motor problems. Dr. Adams listens attentively, puffing on his pipe. "You've got to further objectify and isolate your observations," he suggests.

* * * * *

Diane has come to the Rho home for dinner. Not an unusual circumstance at all. The two women are absorbed in the pre-school program.

In the conversation which followed, Lois again expressed her concerns about Jon. "It's so apparent now that John Streff's observations about him were very accurate. Even in the way he handles the shakers during music – you get the feeling the two halves of his body are acting independently of one another." Diane agreed.

"What we need," she said, "is something that will reinforce the inter-relationship between right and left – eyes, arms, legs, whatever. Remember, we did nearly the same thing with Brianna, in that sling, but Jon can't climb like she can."

"Maybe we can build on Jon's love of trucks," said Lois. "You know, have Joy (environmental design specialist) come up with something like a truck, maybe a platform with wheels on it, and we can work from that."

Diane picked up on the idea immediately, and with growing excitement. "That's really good, Lois. Just think – if you had something like that, and maybe a couple of ropes attached to the wall, coming to the truck – Jon could pull himself along by pulling on the ropes, probably alternating between his left and right arms. And he could pull that way sitting up, or lying down. It might really work for him!"

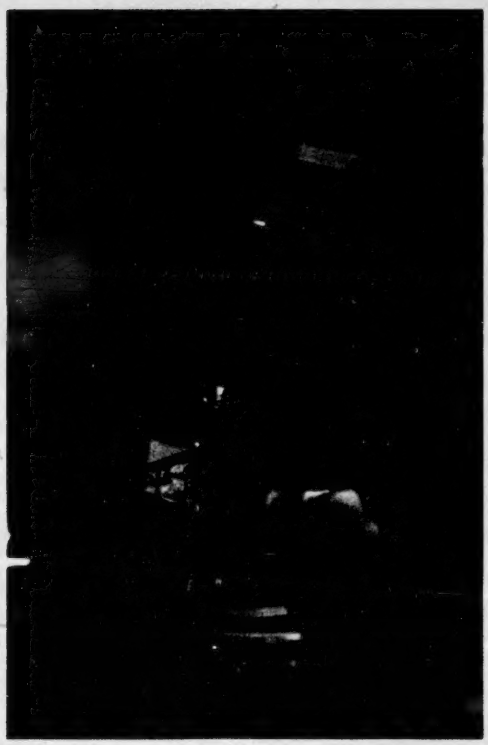
And then, on to the special needs of other children.

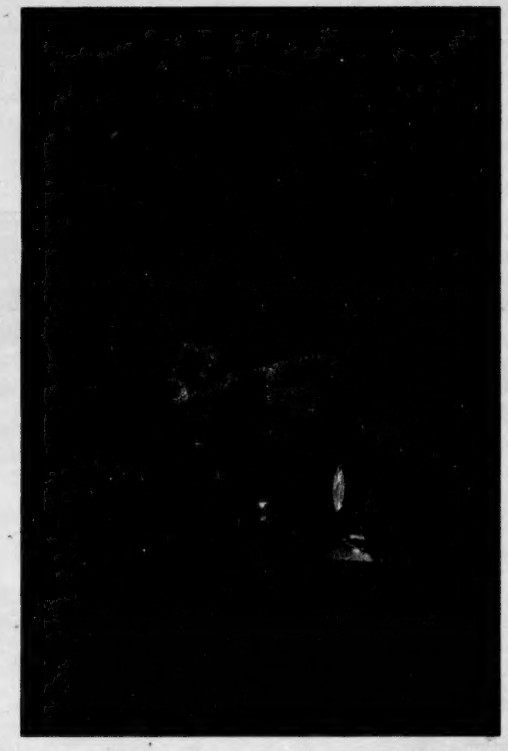
"One more cup of coffee, Diane?" A typical day in this pre-school program was coming to an end.

* * * * *

The program at work. And now a more detailed look at other program children.

the children





Fine motor activities, group experiences, communications — all are among program goals.

The mission of the pre-school program is summed up succinctly in its descriptive literature:

"To promote early intervention of learning disabilities by the teacher joining forces with parents, so that both parent and teacher become more diagnostic in their approach to the child."

But how does it happen? Where do the children come from? What is the process?

In its first year (1972-73), the program enrolled seven four-year-olds. Two had previously been placed in private schools near Cheshire, their tuition and transportation paid for by local funds. Later both were found to have average intellectual potential, but as they entered the program, one was diagnosed as autistic, the other as retarded. One other child, cerebral palsied, came into the program late in the year upon the recommendation of the Newington Hospital for Crippled Children.

The remaining four children, all demonstrating average or better intelligence in testing, exhibited predictors of later difficulties, such as hyperactivity, delayed language and/or physical problems in early infancy. They were known to members of the school psychology staff because of work done with older siblings.

In the program's second year, concepts changed and broadened.

New children were sought for the program in a letter from the Board of Education to 640 Cheshire parents. It noted that the program would have openings for three-year-old and four-year old children with normal intelligence "whose mothers could participate. We are looking for children who are hyperactive; who were born prematurely; who had some kind of birth trauma; or show evidence of some language delay . . . "

About 100 parents responded to that letter, and the screening process began.

As the procedure is handled now, mother

and child have an opportunity to come into the space and to meet the teaching staff. Concurrently, the school social worker obtains a social history and Mrs. Caruthers and her associates begin educational testing.

The Stanford-Binet Intelligence Scale is used in this initial step. "We are looking for average potential in our program," Mrs. Caruthers noted, "simply because retarded children have to be approached in an entirely different way. Perhaps the strongest program candidates of all are those children with no speech at the age of three."

The end result of that process was a program enrollment, in the 1973-74 school year, of seven four-year-olds and 13 three-year-olds. Their disabilities included speech, medical, and emotional problems, premature birth, hyperactivity, multiple handicaps, birth trauma, and hearing deficits.

In the 1974-75 school year, total enrollment was expanded to 26 children, with the nature of the disabilities remaining about the same.

Once a child is accepted into the program, an intensive and continuing effort is made to determine exactly where he is — developmentally, in his gross and fine motor abilities, in his socialization and communication patterns. The Gesell Developmental Test, the Stanford-Binet, parent questionnaires, Teacher Inventory — all are important in the evaluative process. Keen and constant observation, by teacher, parent, psychologist and consultants, is the most important tool of all.

There is no better way to understand the program's approach to these special children than to understand the children themselves.

RICKY

We met Ricky earlier in this booklet: the shy little 2½-year-old with lagging speech and poor motor abilities — the oldest child of two deeply concerned parents.

Ricky's problems were, indeed, severe. In his first weeks in the program, he would approach no one, and answer few. Mostly, he would just shake his head in response to a remark or question. Ricky had reached that frustrating point where he was convinced he could not be understood.

Mrs. Rho, the head teacher, remembers Ricky in those early days this way: "He talked very rarely in school although we knew he had language because he spoke at home. He moved very slowly about the space, and watched a lot, sitting for long periods of time, observing other children. We felt he was motivated to enter into play, but wasn't able to do so because he was so awkward, his motor abilities were so poor."

Where to begin with a child like Ricky, a bright child who simply isn't functioning?

Early on, Ricky was assessed by John Streff, the visual/perception consultant, and a lazy eye condition was discovered. Glasses helped — minimally.

The program team observed Ricky by the hour, day after day, sharing insights, planning strategies.

As is so often the case, the first emphasis was in helping Ricky develop his large motor abilities.

"Even at three, we are dealing most often with children who lack self-confidence, who are well on the road to developing damaging self-images," said Mrs. Rho. "The process is as simple as it is tragic: a child has a problem, medically based, emotionally based, whatever, which makes learning in 'accepted' ways difficult for him. He senses early in the game that he's not performing at an expected level; he learns the meaning of frustration, of repeated failure. Stemming, then, from his problem — which in itself may be relatively minor — comes what is often the most damaging effect of all, a fear of trying."

A small trampoline — part of a climber once designed for an autistic child — was introduced into the space just for Ricky. It proved to offer the beginning of meaningful growth, for Ricky, awkward as he was, liked to jump. After a period of intense involvement with the trampoline — used most often with mother standing by — Ricky began to use a series of modular units in his play, and to move on to a few other selected materials.

Teachers and mother soon shared the view that Ricky cognitively was way ahead of his motor ability. He could solve all kinds of complicated problems, and began constructing intricate bridges and obstacle courses. By year's end, he was even beginning to get involved with the other children.

The heart of Ricky's problem was that his mind was capable of handling nearly any task, but his body was reluctant to respond to his commands. What better definition of frustration?

And then there's the matter of Ricky's speech. Again prolonged observation proved

From this vantage point, Irva can explore the ceiling and get a different perspective on the activity below.

its value – and the enlarged adenoids first discovered by a doctor several years before were in fact largely responsible for the problem. "Ricky, we found, because of his enlarged adenoids was having trouble breathing. And he was not getting his tongue in and up when speaking because he had to keep his mouth open to breathe. That's what affected the clarity of his speech," said Mrs. Rho.

Ricky's mother, Mary Lou, is with him in the classroom, of course, for each of the four days he is there each week. Classes last for two hours.

But her responsibilities as teacher-aide-mother do not end when she bundles Ricky up for the ride home.

Like all mothers, she meets regularly with the staff for extensive, in-depth discussions about her child and *all* the children in Ricky's class. She is expected to keep fairly extensive observation records on Ricky's progress in attaining all of the objectives which have been set for him – and she is, of course, a central voice in helping develop those objectives.

Half way through his second year in the program, Ricky is a changed boy. His speech has come along very well, his motor skills are developing, and his growing self-confidence is apparent.

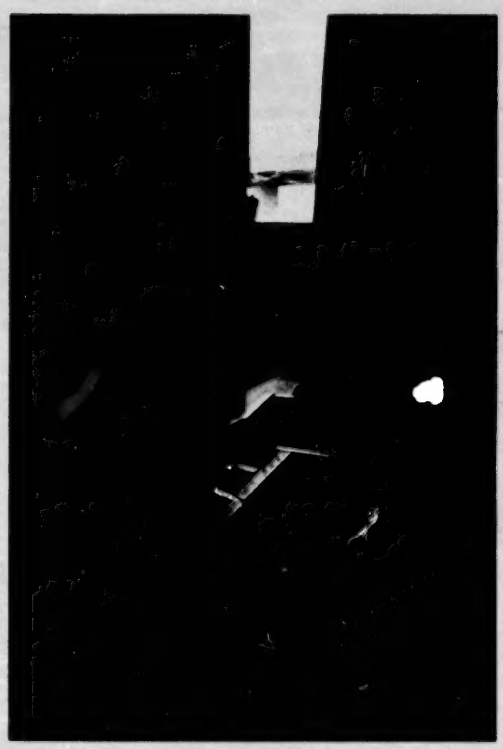
While he remains in the program new objectives will be written for Ricky about every two weeks – objectives which may be formulated only after hours of discussion between mother, teachers, school psychologist, and consultants.

The objectives written for Ricky in mid-November of his second year give insight into the program process. They read in part:

General Goal – Self confidence.

Observation – In the past, we have observed Ricky's obvious interest in the play going on around him, but we haven't had much success in acknowledging his interest by offering him a place in the play. Instead, Ricky chose to wait days for the activity to become available for his use. By saving a special set of materials for his use, we have seen him use, enjoy, and appropriately protect and share what he is working on (large blocks). He followed this the next day by being invited back to the blocks by another child and enthusiastically becoming involved.

Specific Objective – For Ricky to tell an



Dad helped Brandon build this maze to contain the guinea pig.

adult at the beginning of an activity period what he chooses to do . . . and move to it.

Planned Activity and Strategies – The choices made available to Ricky should include:

1) An activity reserved just for his use or climbing equipment with Daniel.

2) An activity he especially enjoys and has the confidence to maintain control of (large blocks, unit blocks).

3) Other materials not then being used.

4) Activities already underway with other children. The range of choices available to him must be broad in order that Ricky will get to do what he tells us he wants to do. The expectation is that he will not always choose the special things saved for him but will return to the play he has enjoyed in the past which is now being used by other children.

A week later, an evaluation was prepared:

11/21 – Gave Ricky a list of things he could choose, including large blocks and climbing equipment. Chose large blocks. Worked with father, building a house with alleyway around it. He spoke up right away, naming what he wanted to do. Later when he needed more planks he wasn't so verbal.

11/22 – Entered very quietly. When I gave him his choices, he chose instead to say, "I want to climb up there," pointing to the tower. On fringe of firefighter play rest of the morning. Refused Carol's invitation to join Bobby and Daniel.

And so it goes, day after day. A process of keen observation, of careful diagnosis, of continuing evaluation. For Ricky, and for all of his classmates.

In the fall of 1975, Ricky will enter a normal kindergarten, where he is expected to find his own place, and to function well within the group.

BRIANNA

We've met Brianna, too – the strabismic child with temper tantrums. In many ways, she is a classic example of the program process at work, although at the time this booklet was prepared she had been exposed to its influence for only four months.

Not atypically, Brianna's mother, Linda, turned to the program in a state she describes as "total frustration." Brianna's violent and frequent temper tantrums were dismissed by the family doctor as a passing thing which she would soon outgrow. The strabismis, not present at birth, was being treated with no apparent success.

The same process of detailed observation of Brianna in the classroom soon revealed that she had profound problems in dealing with time and space. She exhibited an inability to determine where she was in relation to where she wanted to go, and had no sense of how long it might take her to get there. Her diagnosed tunnel vision was affecting her perceptions about everything.

During one visit, Dr. Streff observed that Brianna's eyes straightened when she was on the trampoline (further details on page 45).

Within a day of that observation, Joy Wulke's talented hands had fashioned a triangular macramae climber for Brianna which stretched from wall to wall. And she took to it immediately, for despite her visual problems, she's an exceptionally agile child.

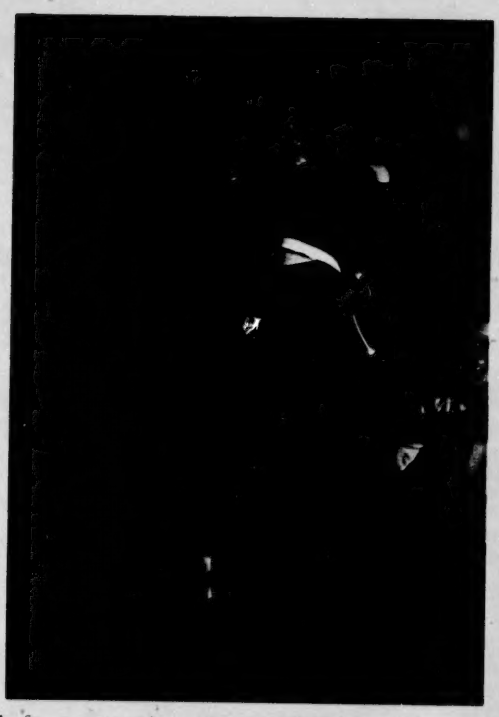
Up the climber she went, and happily snuggled in the hammock, which tended to keep her shoulders back and her arms up.

It was a successful experience for Brianna in many ways. Of foremost importance, her eyes straightened noticeably while she was in the hammock, and she was able to focus on objects out of the nearby window. And she was happy in the device, playing a series of games introduced by mother and teacher. There were no tantrums in this setting.

There is much yet to be accomplished with Brianna. She has little vision in her left eye, and is often unaware of activities to her left. An obstacle course – which has again touched a responsive chord in the child – has been set up along the wall, with a bead track on the left side, which she touches as she walks along. Brianna would, naturally, prefer to approach this track from the right; but with encouragement, she'll move the beads along from her problem side.

The team continues to define objectives for Brianna, and to devise activities to meet these goals. She needs to be more aware of herself in space, all agree, and to modulate her pace when moving. She must come to understand alternatives, and to be more flexible in her thinking. Work needs to be done on her time perception.

For each of these objectives, and more, a specific activity is designed, and specific materials are brought into use. As Brianna begins to experience success in such play, her temper tantrums are receding.



Left, street table and special lighting creates ideal setting for fine motor activities. Top left, snack time is important for language development. Above, motor skills, socialization, co-operation, unusual materials — all come together in Hardin and Carrie's exuberant play. Below, swimming is another confidence-builder.

CARRIE

Carrie, at five in her second year in the program, is representative of the children with medically based problems.

At 1½, she had extensive surgery for the removal of a cancerous tumor. The effects of chemotherapy lasted for a substantial period of time.

At 3, when Carrie entered the program, she was exhibiting a great deal of infantile behavior, and her motor abilities were at the 18-month level or lower. Her single word to the age of four was "Mommy."

Again, mother and staff began to design a series of success experiences for Carrie to help repair the effects of her physical trauma. And again, the emphasis was on developing her large motor abilities. "As we see success in this area," said Mrs. Rho, "we concurrently can encourage language development, as well as socialization and communication skills. No one aspect of development is undertaken in isolation; it's a question of where we place the emphasis at a particular time."

But the simplest plans must still be implemented with care and sensitivity. Carrie has a nine-year-old sister who is a skilled gymnast, so she was immediately attracted to the foam climber. Once on top, she proceeded to do a somersault – and landed on her head.

In the second year, language began to come for Carrie and her motor skills improved dramatically. The emphasis shifted to socialization, and to helping her develop spontaneous speech.

In the fall of 1975, Carrie is expected to enter a normal kindergarten with no serious problems integrating into that setting.

Where might Carrie be today, without the benefits of the pre-school program? She'd be in kindergarten, her mother, Kathleen believes, "hiding in a corner, with something over her head. She'd be lost completely."

TEDDY

Teachers in the pre-school program are quick to comment that Sheila, Teddy's mother, is a gifted teacher. Teddy joined the program late in its first year, and now, two years later, Sheila has joined the staff as an aide.

She's also an articulate spokesman for the process, and no one can describe her experiences with Teddy in the program better than she:

"Teddy was under the care of the Newington Children's Hospital from the time he was 18 months old. To that point, I had spent exactly 18 months trying to get answers from people about his slow development – without success. At Newington, Teddy was started on speech therapy, because he was well below normal level. He had no words, not even a gurgle as a baby. He was thoroughly checked by a neurologist, but the cerebral palsy wasn't picked up at that time. Finally, when he was three, it was discovered.

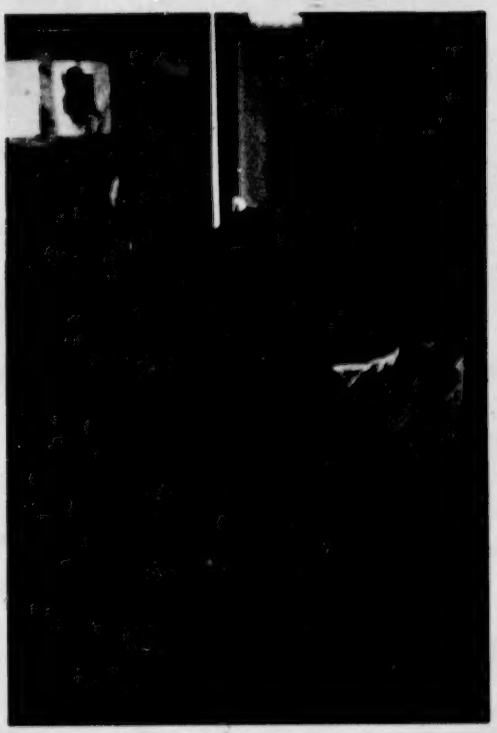
"At that point, things kind of crashed in around me. In one sense I was happy with the discovery, because I finally had a label for Teddy's problem. On the other hand, I was absolutely floored at the thought of caring for a CP child. But of course I came to realize that the label didn't make Teddy any different, he was still Teddy.

"Even in going to Newington, I had many concerns, and felt there was more I could be doing for Teddy. Socialization was a big concern, for he had no one to play with except his sister. Newington was pressing me to get him into a nursery school. I called them all, and I felt I had to say that Teddy was a cerebral palsied child. And when I did, I would get the standard answer: 'Well, we'll put you on a waiting list.' They obviously felt they couldn't handle him, and they never called back. Then Newington referred me to this program.

"Teddy had a variety of problems – gross motor, fine motor, speech, language. He wouldn't talk to anyone, except me and his sister. His speech was garbled, so he finally gave up.

"He was in this program three months in that first year, and in that period of time I was able to single out areas Teddy needed help in, through a close interaction with the staff. With the information I got from staff meetings, I could go into the room and know where to zero in with Teddy. I gave him a certain amount of time at the things he was best at, such as block-building and playing with small cars. He was always working close to the floor at that time. He was building up confidence in himself, so that when we moved into other areas that were more difficult for him, he was able to enter calmly, and be able to accomplish something.

"I feel the mothers are the most important part of this program. The staff made me feel I was so capable, and so important in my son's life. As a result, I was able to gain confidence,



Brianna engages in play at home with Mrs. Rho, above, while Mr. Drury makes notes. Right, children often gain a sense of security in small spaces. Below left, Jon tends to trap the ball with his arms rather than catch it with his fingers. Right, high in a climber, Brianna's eyes straighten as her weight shifts backwards.

and make some very good, meaningful decisions about Teddy's life.

"One example concerns his visual problem. Teddy had been going to a leading opthamologist, and I relied completely on his judgment. He said Teddy should not have glasses until he was ready to read or write. Finally – largely because of the confidence I had gotten in this program – I sought another opinion. And the doctor I talked with, after one look at Teddy, couldn't believe this child had never had a prescription for glasses.

"I told the doctor I didn't believe Teddy would keep them on – he doesn't like to have anything attached to his body. And the doctor replied, if they work for him, he'll keep them on. Now, the first thing he does in the morning is put on his glasses, and he never touches them until bedtime.

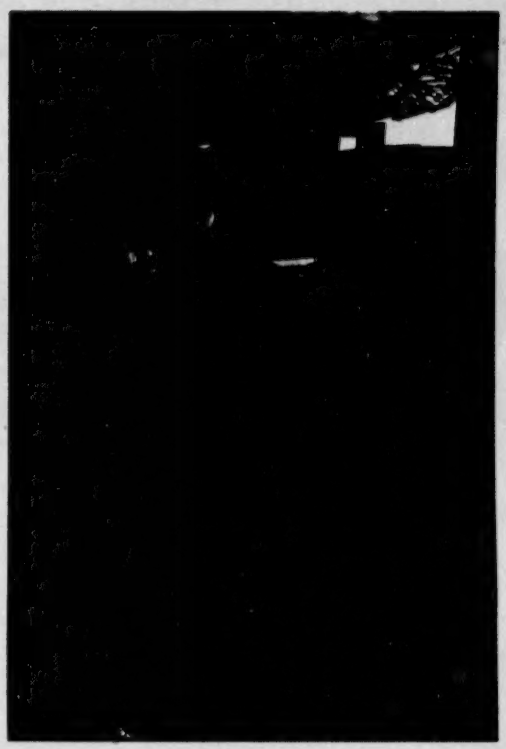
"Teddy's whole world changed the day he got glasses. As soon as he put them on, he looked out the window and said, 'There goes a red truck!' He couldn't have done that before. And he got up from his chair, walked across the room and walked right out the door. That may not sound like much, but before he would have hesitated in approaching the door, opened it, and kind of shuffled his feet to feel his way. Now he just struts down the street.

"Teddy is in kindergarten now, with an aide, and doing very well. The first day of school, he walked into the room and said 'Hi!' He talked to everyone. It was fantastic. He knows there are some things he's saying which people can't quite understand, but he won't give up until he gets his idea across. And he's just not afraid of anything. His kindergarten teacher told me Teddy has one of the most sophisticated senses of humor she's ever seen in a child of his age. To me, that's confidence.

"Without this program, I'm quite sure Teddy would have gone to school at the Newington Hospital for Crippled Children. Going from a protective home environment into a normal kindergarten class would have been traumatic for him. This program provided the bridge he had to have."

AND ALL THE REST

And then, of course, there are all the other children . . . Brett, a bright child with little language at four . . . Beth, with poor motor abilities and slow speech . . . Bobby, a classically hyperactive child . . . Michael, with multiple problems, now functioning in kindergarten without an aide . . . Mike's brother Jonathan, disoriented in large space and troubled in sorting information . . . and all the rest.



The pre-school program says in a direct way that gaining important learning skills can be fun.

For each, the process is the same: total involvement by the parent (nearly always the mother), total commitment by the staff. Constant observation by all members of the team, searching for the child's unusual learning style. And the design of materials and activities which take advantage of those perceived strengths and which gently nudge the child into success tasks in his problem areas. The on-going definition of goals, objectives and strategies to lead the child toward his full learning potential.

Never is the child asked to adjust to a fixed program. Rather, the program is constantly adjusting to the needs of the child. In no sense do parent or teachers consider this a "fix-up" program designed to identify and eliminate a learning handicap. It is, rather, an effort to gear the learning experience to a child's unique learning style, and to help him compensate for defiencies which inhibit his ability to function well.

mothers at work

And this," said Sheila, "is the kind of program mothers would fight for."

It so happens that is not mere supposition, but a statement of fact.

In its first year, the pre-school project was wholly supported by Title III funds. But as a test of merit, Title III funding requires that a local community assume one-third of a project's cost in its second year; two-thirds of the cost in the third year, and all of the expenses thereafter.

Thus as it was formulating its 1972-73 budget, the Cheshire School Board was for the first time faced with the necessity for putting local funds into the innovative program. The Board had consistently expressed interest in and support for the pre-school effort — but like School Boards everywhere, it was under enormous pressure to hold the line on spending if not, indeed, to cut back significantly wherever possible. Was this expensive, creative, innovative approach to learning for very young children an educational necessity? Not an easy question to defend before beleaguered taxpayers.

Pre-school parents sensed that their program might be in jeopardy, and the response was immediate and compelling. Board members were, in effect, petitioned to meet the parents on their home turf — in the pre-school setting itself.

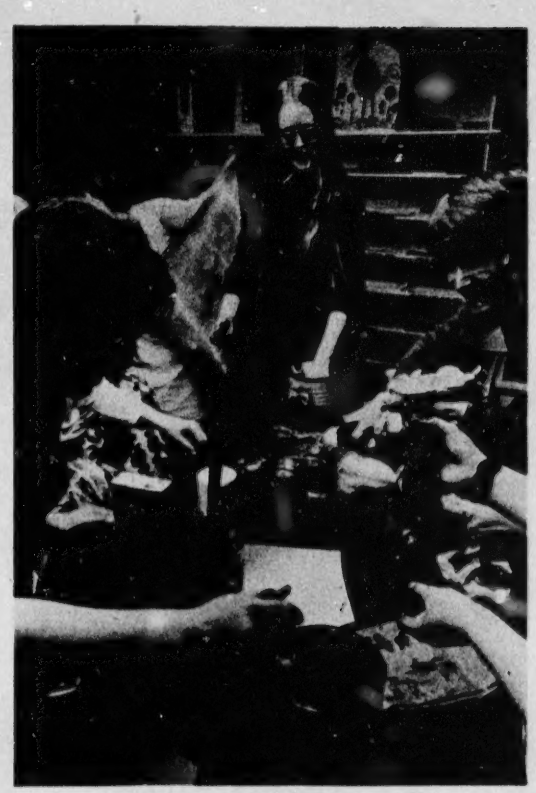
One School Board member later called this give-and-take session with the parents "one of the most useful, informative and meaningful education meetings I've ever attended."

The financial commitment from the Board was soon forthcoming, and Board support has remained strong since.

So the parents have emerged as the strongest, most articulate spokesmen for the educational value of the program in which they are so intimately involved.

Such forays into the financial/political intricacies of public education are not, in the parents' view, where the action really is. The action is in the classroom, working with the children.

The support of the consultants is important. The guidance of the professional staff imperative. But it is the mothers who make the program work.



Under Joy Wulke's expert tutelage, mothers in a workshop learn to tie-dye. Ms. Wulke is at center.

And as their children are approached as unique individuals, so, too, are the mothers. Some prove in a remarkably short time to be natural, gifted teachers, with a great capacity to give to many children. Others require months to learn the art of objective assessment.

THE GIFT OF TIME

The pre-school program was called by one evaluator "a gift of time" for the children, a period in their lives when a learning experience was adjusted to their needs, and they were not expected to meet the challenges of a more structured order.

To a very large extent, it is the mothers who come bearing this gift.

There is, first, the orientation period. One or more teachers visit mother and child in the home, perhaps several times. Slowly, at the beginning of the year, mothers and children are phased into the classroom setting.

In evening meetings, in workshops, in one-on-one discussions with the staff, in meetings with the consultants, in frequent review of the objectives for the children and the formulation of new objectives, in the making of new materials, in countless hours spent observing their child and all the children, the mothers become fully capable of engaging in a diagnostic/prescriptive role. They come to know the full range of materials available for their use, and the value of each. They understand and speak knowingly about the use of space, color and light.

In sum, they collectively make an important contribution to the discovery process which is at the heart of the pre-school program — each in her own way, at her own pace, within her own unique abilities.

PEOPLE CHANGE

It is a people-changing program. That fact is as true of consultants as it is of parents, of teachers and of the children themselves.

"It would be difficult to imagine a more de-egotizing process," one perceptive mother commented. "The frankness and candor of our discussions, mother-to-mother, mother-to-staff, staff-to-consultants, and on and on, has to be experienced to be believed.

"It has never been written into a grant proposal, and it's not included in any of our descriptive literature, but through a natural process we've all come to understand the absolute necessity for complete, total honesty in our dealings with one another. This honesty underlies all of our perceptions about our children, and affects our ability to deal with them creatively and constructively. It is crucial in our constant attempts to assess the strengths and weaknesses of what we are doing, of ourselves as people, parents, teachers, of our program and of our children. It is a process I would recommend to anyone.

"It is often difficult for a mother to sort out her emotions from her ability to make objective assessments. But it is critically important that she learn to do so, if her child is to realize his full learning potential."

AND THE FATHERS

The mother is a central figure in the program. But so is the father, in a less-obvious way.

Lois Rho meets daily with the mothers.

Some fathers are able to occasionally steal time from busy occupations to come into the classroom itself, and work with their children much as do their wives.

But their most important contribution comes in two other ways:

First, fathers are an important part of general program orientation. Virtually all are on hand for evening meetings, and they benefit from information programs arranged by the consultants.

Their most essential role, however, is in the home, where it is critical that the essence of the pre-school program be continued. Fathers have on many occasions designed activities for their children, and made modifications in the home environment, which are compatible with the in-school effort.

Only complete understanding of the program's goals, as they relate to their child, makes such adjustments possible. And the mothers, the staff and the fathers themselves work hard to instill this understanding in the home setting.

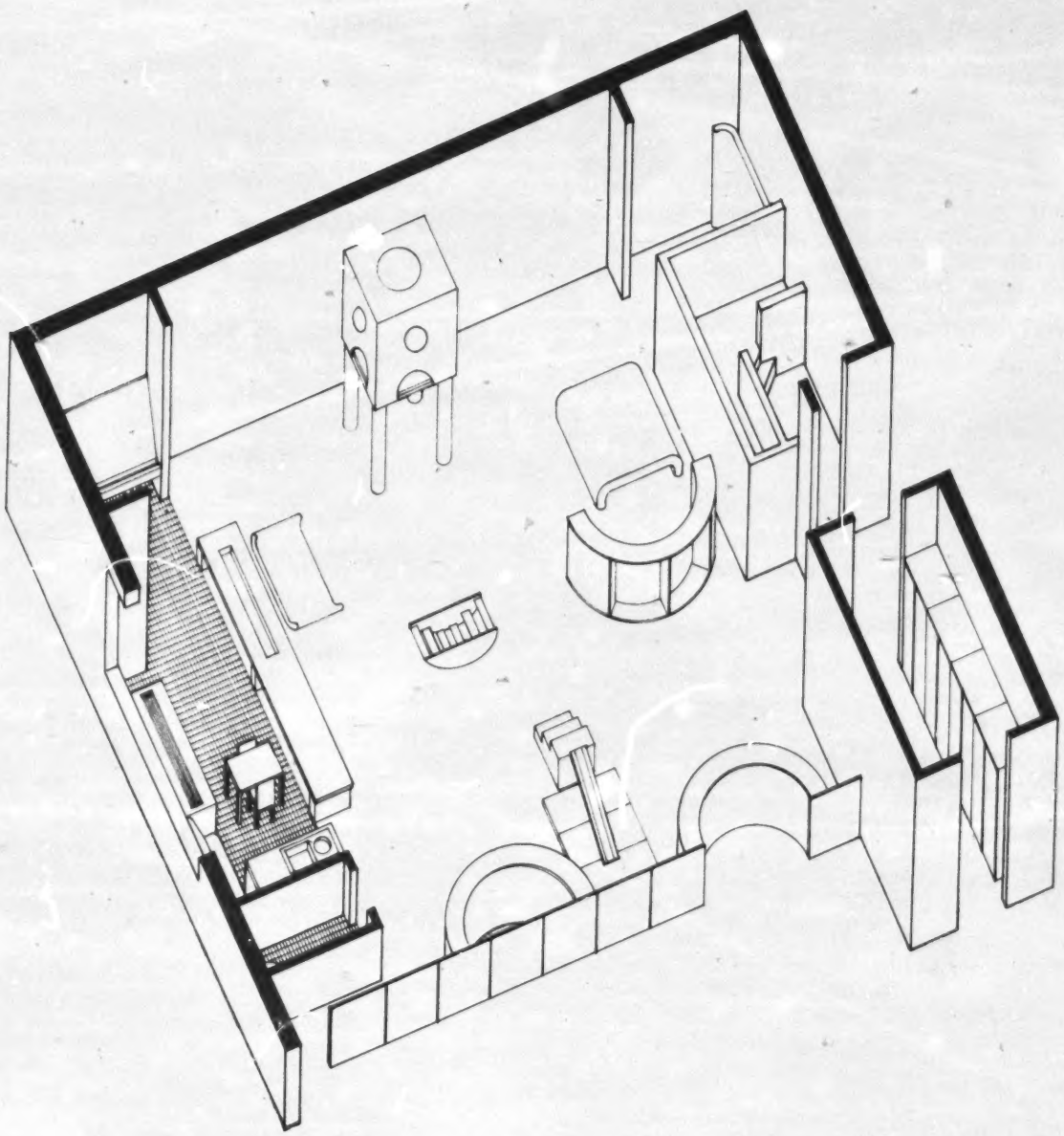
The influence of the mothers ripples out through the school system and into the community.

They were, for example, largely responsible for establishing the Drop-In Center which the staff is conducting during the 1974-75 school year.

Sensing that many other Cheshire parents could benefit from expert counsel, mothers urged Mrs. Rho and her teachers to find a way to reach out to them. The Friday morning Drop-in Center resulted.

And the mothers' perception proved to be right. Scores of mothers, young children in hand, come by to talk about reasonable expectations for the young child, discipline, language problems and dozens of other concerns. They are welcome to return as often as it's helpful, to obtain literature, advice or simply friendly reassurance from a knowledgeable voice.

a place for children



One of tne pre-school rooms as it might be arranged early in the school year. Center right is the observation room, provided with one-way mirrors. Lower right is a storage area with easy access. As year progresses, so does the complexity of the space.

"IT'S SO DARK!"

That's the initial comment heard most frequently by members of the pre-school staff from the numerous visitors who come to observe their program.

And indeed, light *is* subdued and directed in the two classrooms which house the program.

But as one's eyes adjust to the low light level, other striking differences between this physical space and the typical kindergarten classroom or nursery school come into sharp focus, as well.

Large, low tables set off different parts of the room. Colorful, comfortable-looking cushions are scattered about. An abundance of materials encourage youngsters to paint, climb, swing, throw, play in water, string small beads, and much more.

After careful, perhaps lengthy observation, a sense of order and purpose begins to emerge. And it becomes apparent that an enormous amount of thought and work has gone into creating this special place for children.

THE RATIONALE

A major contribution in designing this space has come out of the mind and creative energies of Felix Drury, the program's architectural consultant. But one would be quick to add that every other consultant, every program parent, every teacher has also played an important part in developing the space as it exists today.

Mr. Drury expresses the rationale for change in a provocative way:

"Yes, we do in fact find ourselves in opposition to many of the standard attitudes toward school architecture.

"Our goal is simply to create an environment in which this program can function. And the environment that we need isn't a genuine concern in the construction of a typical school building, or in the operation of a program within that building.

"All of us generally consider a school building as largely the product of a certain professional's thinking – as that thinking may be modified by budgetary, administrative and other concerns. The building is made to stand in its created form through time, and the community senses an obligation to preserve it in as pristine a condition as possible. Indeed, in many ways a school is really a monument to a community, and a community's monument to itself. And of course it represents a sizable investment.

"The end result is that a school is not often designed for growing. It is conceived in the isolated mind of an architect who most often doesn't live in the community which will use the school, it is not subject to very serious modification, and in its construction it simply doesn't encourage modification.

"My concern is not with modifying part of a building over a period of years, but changing parts of the building so they will grow with a child from September through June.

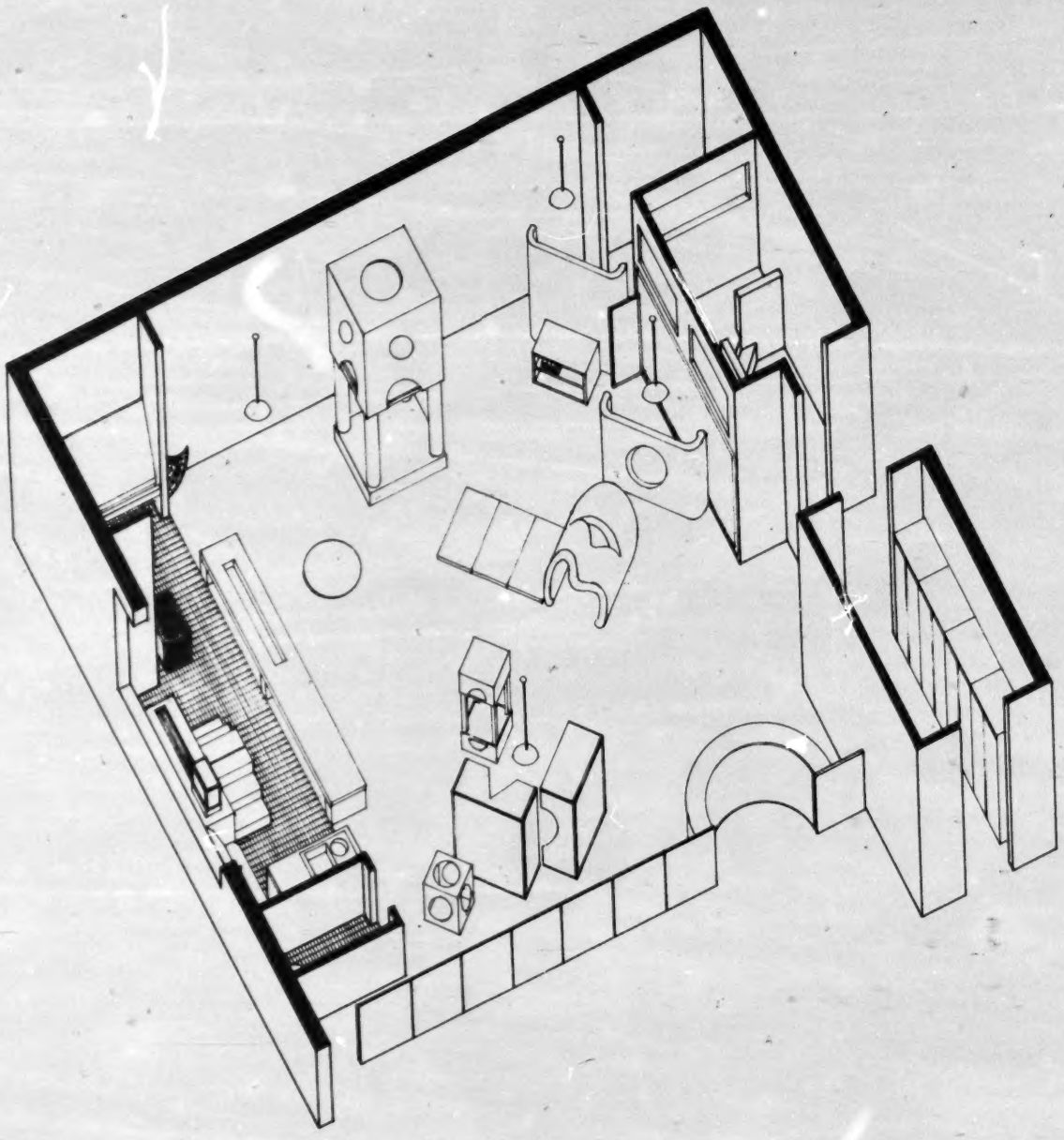
"When a first grader enters a school in September, he is a very different person than when he leaves that school in June. So his environmental needs as well as his educational needs are going to be different. And yet the typical first grade room remains pretty much the same through the year, while the child changes within it."

But change should be thoughtfully controlled, offers Dr. Streff, as he joins the conversation. "Certain strong, basic aspects of the school ought to remain the same, to serve as reference points for change. But many of the things which relate to these reference points ought to be changed, and be adaptable. Ideally, a child should initially enter a relatively simple environment, and that environment should increase in complexity, slightly in advance of the child's capacity to understand it, so that he will grow in it."

A substantial part of the problem, Mr. Drury feels, results from the general conception of architecture as an art form. The equation goes something like this: the more money you have to spend, the better architecture (i.e., art) you'll get.

Mr. Drury disagrees. "I claim architecture isn't an art form at all, but only another arm of the physical environment. Nature provides one environment. Man, in the things he builds, provides another. And, from the moment of first consciousness, we're all involved in the life-long process of relating to what's out there. Architecture is simply part of the world that's out there. What we're trying to do in this program is understand and develop an 'out there' that children can relate to – and in this case, we're talking about children who are having difficulty getting to the 'out there.'"

And, John Streff points out, "out there" is also other people – and the physical environment creates the backdrop against which all



Flexibility in arranging the physical space is a hallmark of the pre-school program. Such items as the Temple, the stairs by the window, and the box arrangements prove invaluable in helping a child develop spatial orientation. Room is sometimes completely re-arranged to better serve the needs of a single child. The central idea is to provide for each child, whatever the nature of his problem, an environment which is comfortable, and which invites individual expression through play.

inter-personal relationships go on.

Ultimately, then, this carefully constructed environment in the pre-school program simply seeks to move a child along a road he finds difficult to travel. In doing so, it veers off dramatically from established principles in classroom design.

Many agree that the child with learning problems most often wants to work only in the areas of his strengths – a fact which may lead him into a tiny corner of existence, cutting him off from the skills and abilities which could enrich every aspect of his life.

The pre-school environment does, in fact, entice, cajole – and sometimes even gently push – the child to function in ways he finds difficult to do. At the same time, it strives to remove from his environment those activities which would make it easy for him to again withdraw into a limiting corner of existence.

Both adding and subtracting from an individual child's environment must be done with great awareness and sensitivity. Such manipulation, successfully done, represents one central theme in the pre-school program.

Those closest to the effort agree that for the child to become functional, he needs a basic sense of being in balance with himself in his environment – so that he can begin to look outward, with decreasing concern for his internal discomfiture. That means, said the project director, Mrs. Caruthers, that "there ought to be enough variety in a place like this so that a child, coming into it, can immediately see a place where he can feel at rest and be somewhat comfortable. And that place, wherever it is, ought to be connected in a variety of ways – some very direct, some quite subtle – to all of those other areas where the child isn't operating very well."

The child who needs a soft, slightly raised place to feel comfortable will, then, easily discover it. He can get on it, and observe while the life of the class goes on around him. He may, of his own volition, be drawn into other activities. Or the teacher or his mother may encourage him to leave his comfortable place, however briefly, to venture into more difficult areas. But if pressures build, he can quickly and safely retreat to his special place, and restore the balance so essential to meaningful learning.

IN THE BEGINNING

In the beginning, the space was empty.

Four walls, a floor, a ceiling.

A second empty room was added in the second year, when the program was expanded to include three-year-olds.

And, well before the first child arrived, the meetings began, sitting on the floor in the empty room. Most often, the gathering included the consultants, Felix Drury and John Streff, the program teachers, Lois Rho and Diane Gamble, the project director, and school psychologist, Gwynette Caruthers. And a handful of the Yale architectural students who had already made an impact on several schools in the Cheshire system. Of those students, John (Jake) Foley was to become the program's special tutor and audiovisual specialist in the second year, and Joy Wulke its educational materials specialist.

The conversations were far ranging, as this group, time and again, probed and pondered the special needs of special children.

There was quick agreement on the need to observe the children in a non-distracting way. An observation room, large enough for a half-dozen people and with a large one-way mirror, was built. The mirror came as a gift from the parents of a learning disabled child in the elementary school. In the second year, a closed-circuit TV and videotape system was added to permit simultaneous observation in both the three-year-old and four-year-old rooms.

As the conversations continued, a series of meaningful decisions were made and implementation of these ideas began. Among the most important:

LIGHTING

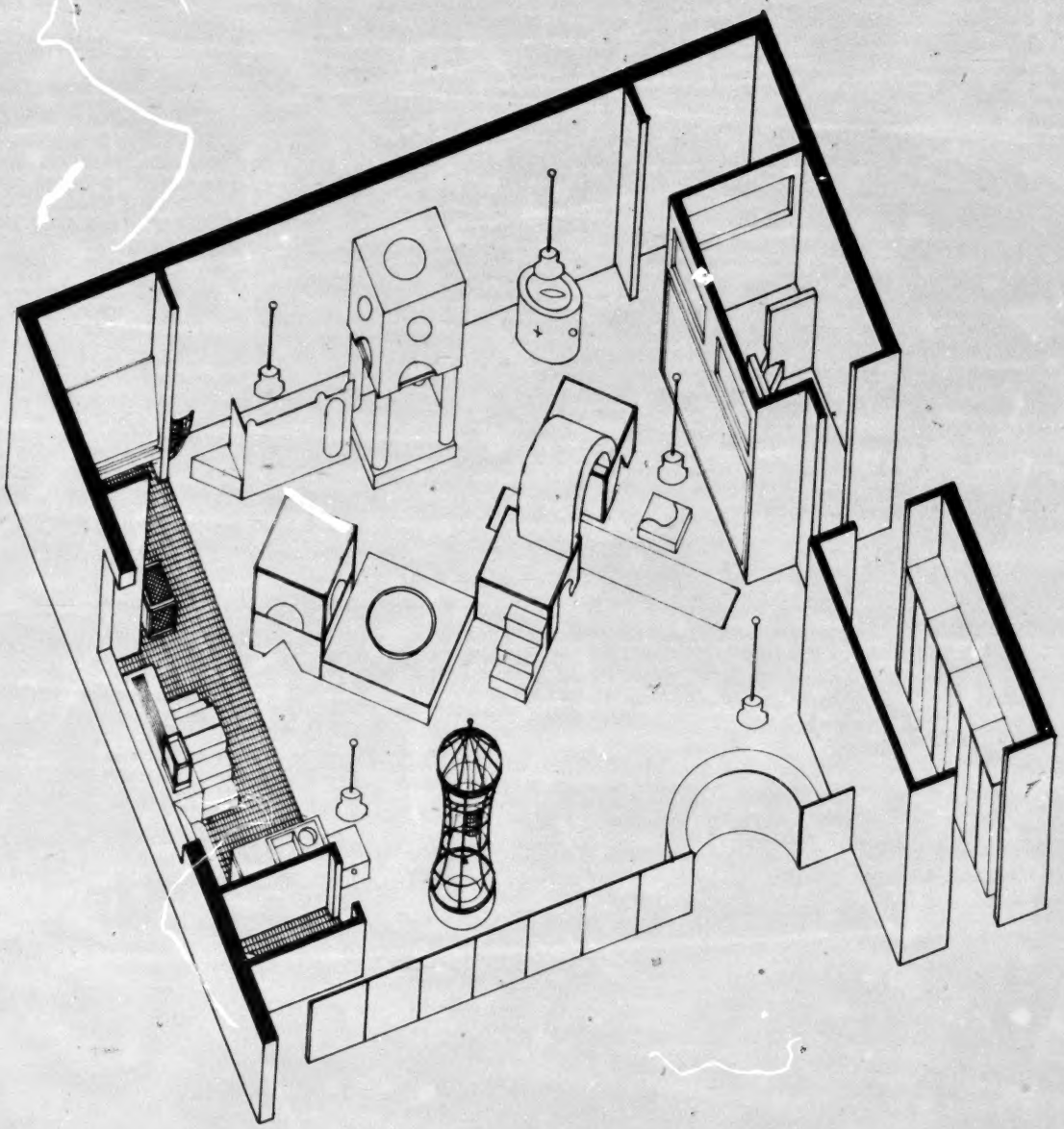
What is the response of the organism to light? It's pretty basic, says John Streff. Plants grow toward it, babies turn to it. It nurtures every living thing.

It is, then, a powerful force, and a force which should be understood and respected as it affects a child's ability to learn.

The lighting most often found both in our supermarkets and in our schools is of the fluorescent type, with properties which may seriously inhibit learning.

Fluorescent lighting is, first of all, a broken spectrum – a series of disconnected color ranges, difficult for the eye to handle. And its general color range is significantly harsher than other forms of light.

It's also an oscillating light, going on and



Toward year's end, the pre-school environment has become more complex to both interest and challenge the children. While the space initially tended to utilize the center of the room for large motor activities, this arrangement is more integrated. Lighting is more focussed, and several new materials appear, including a cone climber, foam cylinder and trampoline climber. Photo on page 44 shows this arrangement from a low angle. Despite obvious changes and increasing complexity of space, important constants remain to enhance the sense of security and stability for the children in the room.

off with great rapidity, so that for some people, all movement under fluorescent lighting is stroboscopic.

The result is that fluorescent lighting makes concentration difficult — a fact that may not concern owners of supermarkets, but which poses problems for children in school.

In the average classroom, the attempt is made to distribute the same quality of (fluorescent) light, of the same intensity, over the entire room. And that room is a whole world to the children in it, for a large part of each day and a big part of each year. Said Dr. Streff, "It's as though we are saying, starting tomorrow, that our sky will be fluorescent lit, from horizon to horizon, uniformly, so there will be no direction of light. All shadows will be eliminated. Which simply ignores the fact that we can only see things well if one side is darker than the other."

In the pre-school space, light has been used to create light-shadow walls around the room. Emphasis has been created on areas of interest through the careful placing of lights. And lighting has been brought down to the task at hand.

"A teacher asks a child to put rings on a peg," said Dr. Streff. "He may be looking at the task with eyes that don't work that well anyway. The bright light source which attracts his attention is way above him. In simple ways such as this, we're making his problem much more difficult than it need be.

"In the program, we've just brought the light down to where the action is, and let the areas around the action go darker. That tends to screen out visual distractions."

Head Teacher Lois Rho has observed the effect of lighting on children many times. "Subdued, controlled lighting has a noticeably quieting effect on all children," she has noticed. "It is a marvelous tool in dealing with the hyperactive child, who is constantly faced with the problem of screening out peripheral information. But controlling light is as useful with all children in establishing the tempo of activity in the room."

All agree there's much more to be done in using light to its optimum effect in the program. "When children are working with three-dimensional items, it's important that the light model the object to enhance its three-dimensionality," said Mrs. Rho. "In like manner, when they're working with flat objects, such as paper and pencils, flatter lighting is more appropriate. We're constantly seeking ways to gain greater control over our use of light."

COLOR

Assume your eyes are OK. If you have a friend who's an optometrist, here's a simple test which will tell you something about the spatial qualities of color.

Place an 8½ x 11-inch sheet of white paper on a wall, with a six-inch blue border around it. Stand 20 feet from the paper, and then measure the focus of your eyes from the white of the paper to the blue of the border (that's where you'll need your optometrist friend). The difference will be enormous — something like 15 feet.

Eyes in good working order — and brains sorting information quickly and accurately — make those kinds of accomodations constantly, with no conscious effort. But color can create serious difficulties for the child with problem eyes or imperfect perceptions.

While colors have spatial values, they have emotional qualities as well — which we express in the descriptive words of "warm" and "cool." Any child (as well as any adult) will react to the emotional impact of color. And the emotionally disturbed child (whose emotional problem may be linked directly to his visual perception problem) can be expected to react, as well.

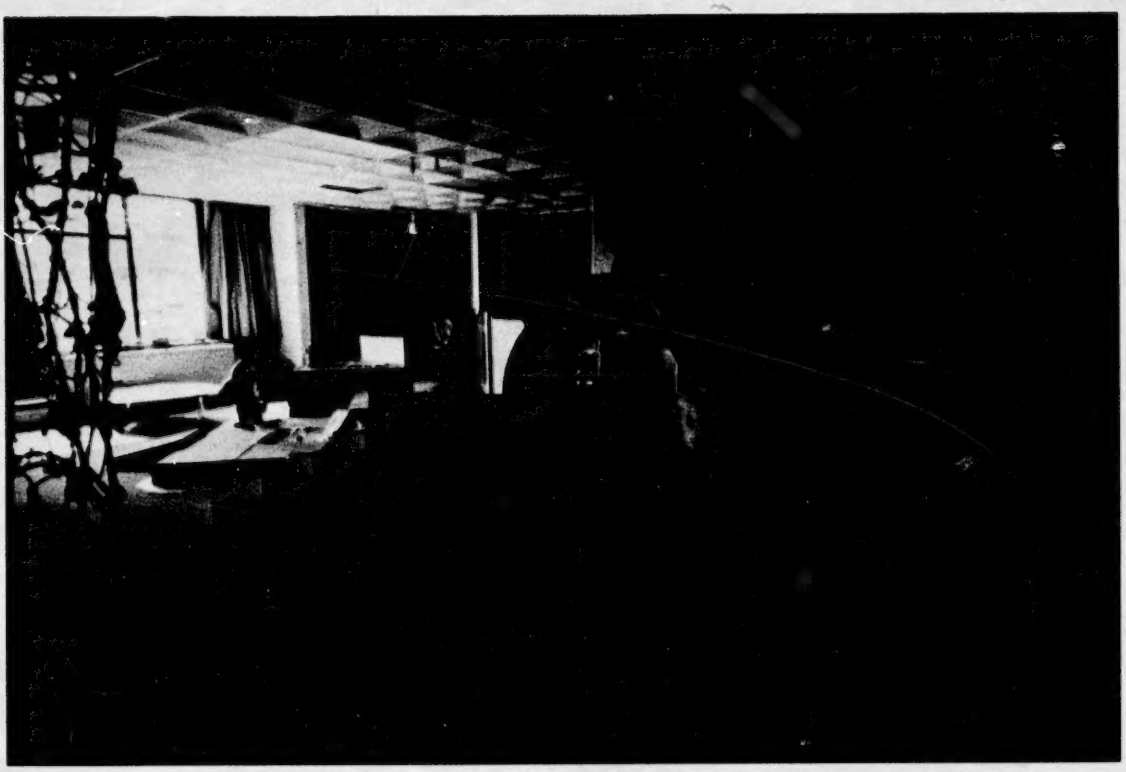
Interestingly enough, the troubled child may react to any such stimulus — light or color — in exactly the opposite manner expected. In so doing, he reveals a great deal about the nature of his problem — and underscores the cardinal rule that a program designed to meet his special needs must be totally individualized.

Color, then, has been introduced into the pre-school setting with great care. Many of the large, permanent structures are of natural wood — a neutral color. And wood offers a child a second option, beyond the natural tone: the interesting pattern of grain.

Active, intense colors (the "warm" ones) are used sparingly, and only to accomplish the end of introducing action. Rather, the emphasis has been on providing the child with an essentially neutral background, and inviting him to introduce his own colors into it— to make his own mark on his environment.

TYRANNY IN THE CLASSROOM

Send a child into a backyard with an apple



Photograph shows one of the rooms arranged in a manner similar to the third drawing in the series.

tree in it and watch him for 10 minutes. Of course he will attempt to climb the tree. The desire to attain height is expected of our children *out-of-doors.*

But why not indoors? What educational value, if any, is achieved by the young child through climbing?

These were questions which consultants and teachers talked about at length before a single one of the climbing structures were put in place in the pre-school classroom.

"As these conversations went along," recalled Mr. Drury, "it became apparent to us that the teachers were expressing the tyranny of the single surface — the floor. Four walls and a floor simply didn't constitute a sufficient domain for the natural interests of kids. We at first moved things around horizontally. We moved the large table into the center of the room, and made the room seem half as large. And then we picked up on an idea we had tried in the elementary grades, with some success: if we were going to make horizontal changes, we should make vertical changes, too — and bust the tyranny of the single surface."

What came, at first, was a series of "sub-ceilings" — a system of boxes that permitted children to get into and climb on top of. A four-by-four-by-two-foot box remains one of the most-used materials in the space, serving some children as a small room, and others as an observation tower.

"We found, as we went along, that altering a child's vertical environment by an inch is the equivalent of altering his horizontal environment by a foot. In other words, raise a child two feet off the floor and you're really putting him in another world," Mr. Drury concluded.

Through long and careful observation, teachers and parents are convinced that the vertical climbing spaces in the room (right up to the ceiling now) are invaluable to the children.

"If a child is having terrible trouble relating to the space," said Mrs. Rho, "you can often watch his anxieties drain from him if he has the chance to climb above his problems, and observe quietly for a period of time. There's something very secure about being high up, out of the swirl of the group. The child can watch the ebb and flow of the

activity in a detached way. And he'll return to it when he's settled and ready."

UNDERUSED SURFACES

The staff and consultants identified two other "vastly underused" surfaces, and proceeded to make them part of the children's environment. They are the floor and the ceiling.

Most adults ignore the floor, because by the time they are old enough to teach children, they are attuned to table-top learning. The floor has grown out of their close-order focus. But not so for children. The floor is very much in close-order focus, and as such it has the potential to be a terrific learning surface. Much of the pre-school experience takes place on the floor.

The ceiling is another matter, posing special problems (such as fire and building codes).

Lamenting lost wisdom, Mr. Drury notes that in ancient days, "the ceilings of cathedrals and palaces were the most elaborate of all surfaces, attempting to offer the release which the sky does. But in our hung ceilings in today's typical classroom, we have this uninteresting, relentless accoustical tile, with a grid pattern which rarely fits the size of the ceiling."

The problem has been partially overcome by using the strength of the ceiling to hang things from – a new and imaginative hooking system was being made as this booklet was prepared. The goal in the immediate future is to make the ceiling a surface where things happen. "We want children to be able to get up to the ceiling, and do something once they are there," said Mrs. Rho. "Perhaps they'll put a fabric on it, or work on a fresco. They'll be able to come down, look at their work, and go back up to make changes or continue. Why not?"

A DISCOVERY PROCESS

Designing the pre-school space has been, then, a discovery process. The staff and consultants first identified the variables they had to work with – light, sound, temperature, space, structure, color, etc. – fashioned these variables in a creative way, and proceeded to observe, minutely and continually, the children's reactions to the stimuli being offered.

The fact that it is indeed a process rather than a package points up the necessity for change – and change is one of the program's constants. What is this child responding to? What might produce a better response? How do we produce that item and put it to work?

As we noted, in the beginning the space was empty.

The first item introduced into the room was a foam climber (it's still there, much in use).

Every item since introduced *has been related to the special needs of one child, as those needs were perceived by the parent and the staff.*

Virtually all of the materials have been "custom made" – by Joy Wulke, the educational materials specialist, by the mothers and by the teachers.

The process works something like this:

Philip was a seriously disturbed, autistic child, with no sense of boundaries. He was fearful of getting off the floor; he simply couldn't bring himself to take that first step upward.

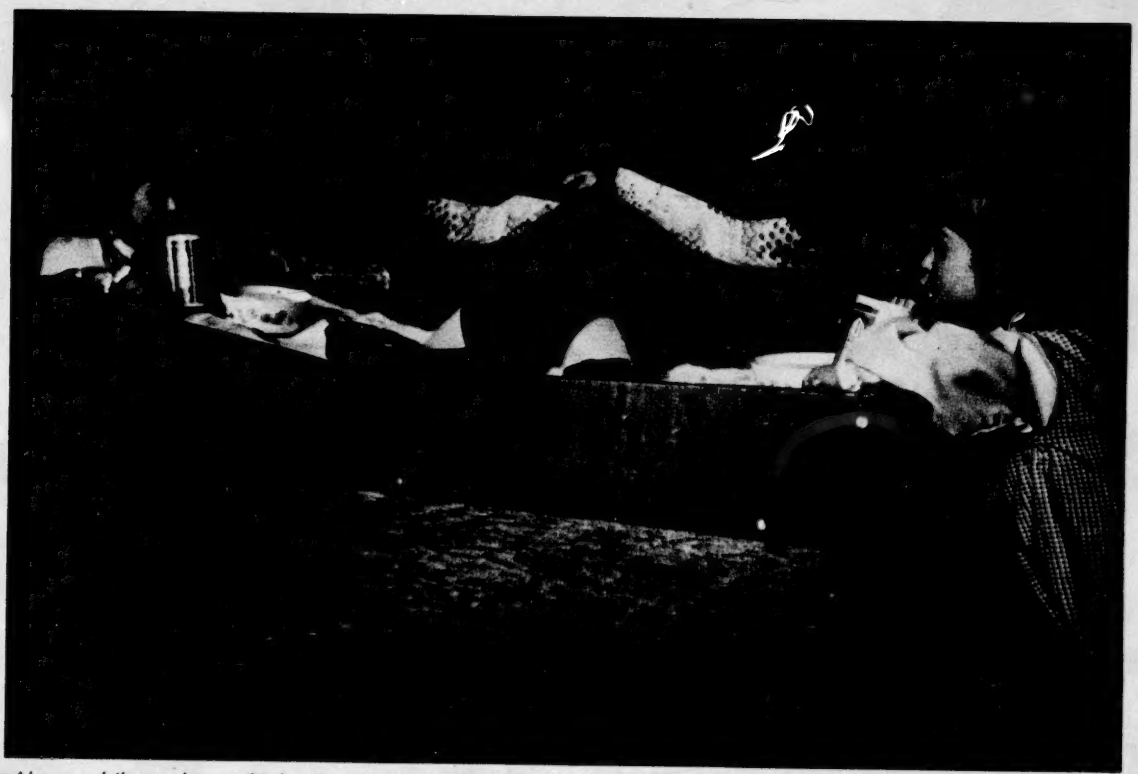
Philip was the topic of many hours of discussion. The result: a huge innertube, encased in a macramae climber which reached to the ceiling, was put in place.

It took time to involve Philip with this device created solely to meet his special needs. But eventually he found a sense of security, of a boundary, seated atop that innertube, and eventually he began to climb up the macrame cargo net. Still later, several children were able to climb in the device with Philip; the first step in socialization for this disturbed child had begun.

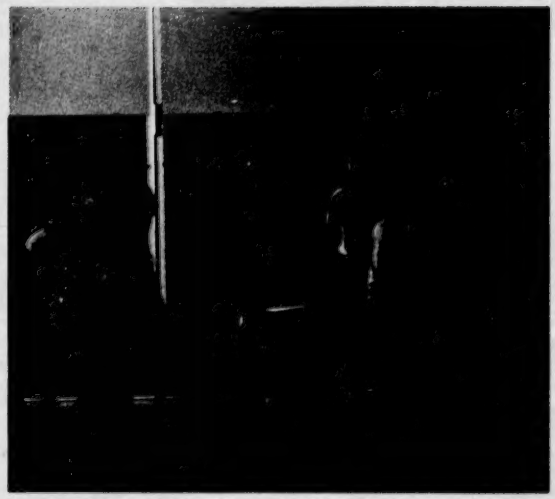
Brianna is strabismic, and, before entering the program, experienced numerous temper tantrums each day. During one visit, John Streff observed her carefully as she jumped, along with other children, on Highland School's trampoline. She approached the play freely, and jumped with enthusiasm, laughing, arms outstretched to help keep her balance.

And the observant Dr. Streff noticed that as Brianna jumped, especially as her weight tended to shift backward and her arms flailed a bit, her eyes straightened.

Within a day that important observation was translated into new activities for Brianna. A new, triangular macramae sling – which she took to with great enthusiasm – kept her in somewhat of a backward-leaning position, arms out. For most of the time she is in the sling, her eyes are straight. A whole new series of games was designed for Brianna, as well



Above, while mother and school psychologist observe, Mrs. Rho works with a child in the Drop-In Center. Below, Jon's expertise on the trampoline focuses the activity for all the children and their mothers.



While their mothers attend a workshop, children prepare for music. Mirrors help give focus to the activity.

– games which mother can play with her at home as well as at school. Most of them get Brianna in the familiar "tug-of-war" position – weight back, arms out – and eyes straight.

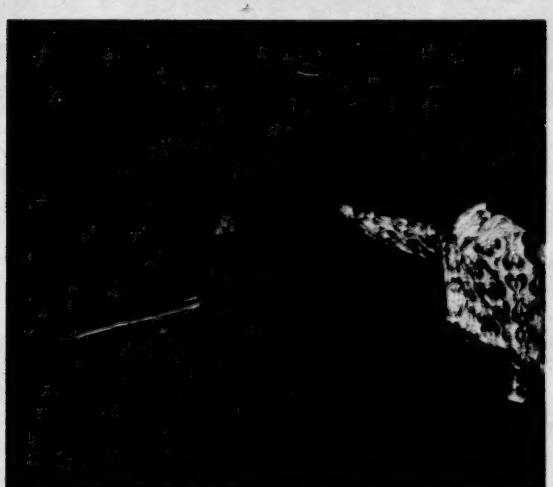
And remember the evening conversation between Lois Rho and Diane Gamble about Jon's special motor problems? That talk resulted in the creation of a "truck" for Jon remarkably similar to the device first envisioned. Pulling himself along the rope track, using his right side and his left side much as Diane suspected he would, has become one of his favorite activities.

There are many other examples of materials designed and introduced in the space specifically to meet the needs of one child.

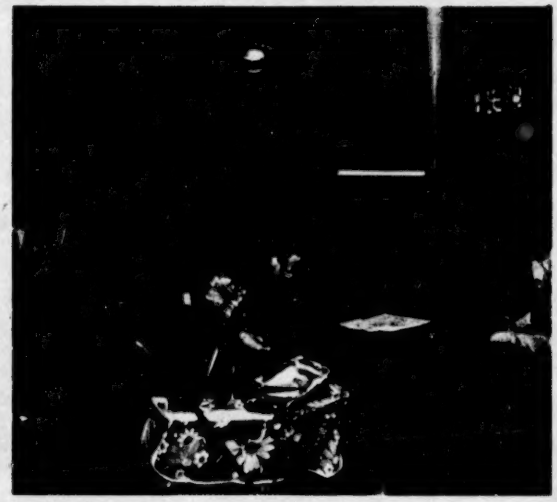
In most every instance, a new material exceeds its original purpose: Philip's innertube climber has since become a favorite place for many children. Other specially designed materials may arouse the interest of youngsters in a way which is surprising and revealing to the staff. For despite the most careful judgments of adults, the program children – like all children – remain unique individuals, always capable of expressing themselves in original, unexpected ways.

AND IN THE HOME

It has been an axiom since the program's first day that the child's learning experience must be complete – that it must extend beyond the classroom walls to the nearby play-



At story time, children experience difference between the concrete and representational as they match figures to storybook. Right, working with baker's dough, they enjoy tactile sensations.



Left, mothers created outdoor activity which Brett and Bobby find intriguing. Right, new play area was created in Brianna's home following a visit by Mrs. Rho and Mr. Drury.

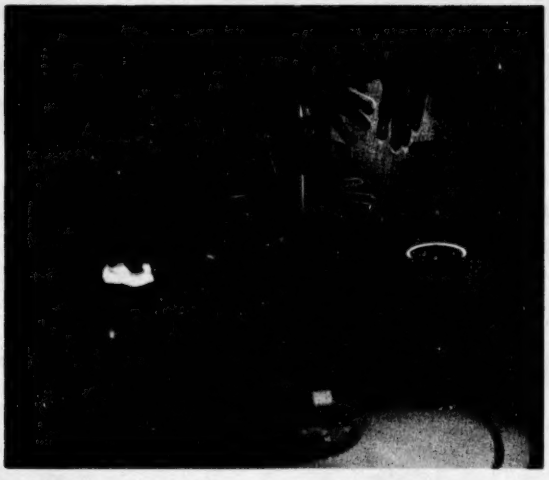
ground, and from the playground into each child's home. This stress on wholeness and continuity in experience is a central reason for introducing the mother into the classroom: she provides the bridge between home and school which can be obtained in no other way.

The program staff emphasizes the importance of the home environment, in home activities and home relationships in a number of ways. Head teacher Lois Rho and one or more of the classroom teachers visit child and mother in the home several times before the child initially enters the program. Suggestions are made to mothers frequently about things which they can do in the home, and changes which they can make, which will help their child deal more effectively with his learning problem.

And, upon invitation, Mr. Drury, the architectural consultant, and Mrs. Rho will visit in the home for the specific purpose of suggesting changes which will be helpful to the child. The "Architectural Recommendations based on Educational Planning in School" which goes to the mother is an impressive document, well worth quoting.

Linda is the mother of Brianna, the strabismic child with temper tantrums. The memo to Linda following a home visit noted, first, that the goals for Brianna at school have been:

1) To reduce the high level of frustration



Mothers and children enjoy a special relationship in weekly swimming sessions. Right, overhead projector is ideal way for children to see themselves through spatial transformation.

which builds up in Brianna when she tries to follow normal patterns of space and time.

2) To help Brianna develop a sense of personal placement in space.

3) To help Brianna and Linda work out a more relaxed relationship.

4) To help Brianna reduce the intensity and frequency of her temper tantrums.

The methods of reaching these goals in school were listed as:

1) To increase Brianna's awareness of objects and space to her left by such means as an obstacle course with tactile experience to the left.

2) To flex Brianna's posture outward and backward by use of the trampoline, the hand car, and the cargo net.

3) To help Brianna recognize distance in relationship to her position in space by hitting the tether ball and dancing and jumping in front of the large mirrors.

4) To help Brianna develop a sense of time through music and sequential movement, tether ball, and rope swing.

5) To provide operational accommodation for those postures which seem to allow Brianna to act easily and in balance by using the trampoline, the macrame hammocks and the cargo net.

It was suggested to Linda after the home visit that she follow-through on this program at home in this manner:

1) Reduce the number of objects in Brianna's bedroom and clear as much floor area as possible. Place the bed along the wall instead of projecting out from it. Leave one wall open. Simplify decoration and reduce the amount of pink in the room. It would be best to paint the walls of the room light beige.

2) Keep the small table so that Brianna can make drawings in the room while being able to see other drawings she has made hanging on the opposite wall. Always have her hang up her drawings.

3) Hang a tether ball from the ceiling of her room and put a few bright green "press-apply" dots on it. Ball should be free to hit at least one wall. Color of dots should be changed every month or so.

4) There should be a low mirror on one of the walls so that she can watch herself play and dress.

Spatial transformations will help the child deal with reversals in later education.

5) Use soft lighting such as wall lamps over the table and bed. Use low light even during the day. The natural light comes into the room too high.

6) Use adjoining walls for sequencing by taping a strip of paper (4" to 6" wide) along the walls at Brianna's eye level. Run the strip on two walls in the bedroom and around one door jamb onto a wall outside her room. Paste cut-out figures on the strip, such as people walking or animals.

Such recommendations — the collective thinking of the entire team — have proved to be important to many of the participating mothers who are working hard to bring the experiences and rewards of the classroom into their own homes.

THE OUT-OF-DOORS

In the program's third year, all those intimately involved in the program can observe with some objectivity what has been created within the four walls, the ceiling and floor of two classrooms. And the realization came as only a moderate surprise: they have to some extent re-created the out-of-doors. It is all there, in modified form: hills and valleys and plains and trees and sky. A natural environment, indoors. Perhaps that is why it is so attractive to children.

the staff

Gwynette Caruthers

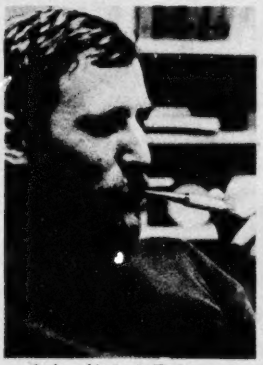
Lois Rho

Dr. John Streff

Felix Drury

Dr. Robert Adams

Diane Gamble



John (Jake) Foley

Emily Thach

IF, AS HAS BEEN DESCRIBED, THE pre-school program is "a symphony of learning," then the professionals are its conductors.

And, because of her key role as the teacher supervisor, perhaps Lois Rho's baton rises a bit higher than all the rest.

Professionally, the position requires a person with a strong background in early childhood education, who understands special needs.

But having such knowledge is one thing; being able to share it effectively, both with her teaching colleagues and with the parents, can sometimes be another. It is crucial, in helping the mothers find ways to deal effectively with their children, that she find methods to communicate this knowledge in a meaningful way, related to the dynamics of the classroom.

In doing so, she must be able to assess the strengths of individual parents, so that each can fully participate in the program in her own way. The pervasive attitude of mutual, cooperative effort is *essential* to the program's success.

And there is more. The teacher supervisor is uniquely positioned to assess the contribution which individual consultants can make to the program. It is largely up to her to effectively integrate their abilities into the total effort.

With her teaching staff, she writes and develops curriculum for both individuals and groups, plans the parent program, helps with the overall assessment of children at mid-year and year's end. With the project director, she shares responsibility for communicating the program's goals and concepts to the en-

tire school community as well as to the general public, and acts as the program's liaison with the school principal.

The special education teachers support the teacher supervisor in many of these endeavors, emphasizing once again that it is the team approach which brings worthwhile results.

Other members of the team:

The *School Psychologist,* who in Cheshire is also the Title III project director. Mrs. Caruthers plays a key role as a consultant in the observation booth with individual parents, and with many visitors.

She is responsible, too, for screening children for the program, for pre-and post-testing of the children, and, in collaboration with a research and evaluation specialist, in selecting an overall research design.

Mrs. Caruthers is always available for conferences with program parents, and she makes a point of interpreting all test data with each parent individually. She works constantly with the staff, as well, in assessing individual children's progress and in designing objectives and strategies for each child.

It is fair to say that without Gwynette Caruther's curious mind, her persistence and tenacity, and her commitment to finding a better way, the pre-school program might not have been more than an interesting, passing idea. No one is more aware, or convinced, of the program's potential for broad application than she.

The *School Social Worker,* Marvin Perlin, meets weekly with parent groups to discuss topics of mutual concern, and is available upon request for conferences with individual parents. He too, is a constant source of information to the staff about the special needs of each program child.

The ability of a talented person such as Joy Wulke, the *Architectural Design Specialist,* to translate important observations about the children into original materials to meet specific needs has been an important contribution, on a week-to-week basis.

The principal role of the *Architect,* Felix Drury, is to interact with the staff and optometrist and to adapt the physical environment to the perceived needs of one child or of all the children. His important role as a consultant in the home has been noted. He has, as well, comoleted plans for a pre-school building (see Summary, page 57) which incorporates many of the concepts learned in the program to this time.

The program's consulting *Optometrist,* Dr. John Streff, continues his work with both parents and staff in defining conceptual development through physical movement. His ability to make abstract concepts meaningful and workable, and his flashing insights into the needs of children must be regarded as keystones in the program's development.

And Dr. Robert Adams, the consulting *Psychiatrist,* is something of an in-house devil's advocate. A regular observer of the dynamics of behavior within the program, he is constantly challenging the staff to explain its approach to a child's problems. He plays a key role in establishing parameters for the effort ("Don't try to play psychiatrist. Don't let the mothers forget they're mothers, not teachers.").

He also often meets with parents to discuss many topics of concern: dying, discipline, aggression and much more.

The *Evaluation and Dissemination Specialist,* Emily Thach, collects data for evaluation, helps in the overall research design, aids in writing grant proposals and evaluations, and promotes program public relations through the media.

Add the mothers to the team and it is an impressive group, each in his and her own way helping give shape and form to the learning process. Each would be quick to point out that the program provides few, if any, definitive answers. But the process itself is well-thought-out, well-defined.

And it works.

Marvin Perlin

Joy Wulke

evaluation

There are so many aspects of the Cheshire pre-school program which resist statistical analysis. The parents have registered their own evaluation in a subjective but highly meaningful way: it is a program, they feel, worth fighting for.

But what of its spin-off effects? Its long-term potential? Can its substantial costs be justified? And finally, what hard evidence exists that it is indeed making a difference?

The man who has been something of a mother hen for the program, providing an incubator in which it can grow and flourish, is Highland School Principal Chester W. Crowley, Jr. He is convinced that the program has had a strong, beneficial impact throughout the school system. For a number of reasons.

"On this pre-school team, we have three teachers who have really learned how to diagnose, prescribe and prognosticate when dealing with the special needs of children," he observed. "And they are doing it very accurately, with good methods – and they are not doing it alone, in isolation. They are doing it with parents. *That* is the key factor.

"Two-thirds of a child's education goes on at home. That, to me, means parents must be totally involved in the educational process."

In the pre-school program, Mr. Crowley believes, parents have reached a level of involvement which is totally new. "They are, as a result, becoming extremely knowledgeable about the learning process, and about how schools function. As they do, they are forcing teachers and other professionals to also become more knowledgeable. It is a circle of reinforcement."

The potential? "I'm hopeful that we can incorporate the parental aspect of this program through our third grade level at least. In the process of moving toward that goal, teachers are going to have to acknowledge that parents can make a real contribution in the classroom, too."

By 1980, Mr. Crowley hopes as many as 50 per cent of the mothers of children through the third-grade level will be coming to school regularly with their children. "If we can attain that goal, we will never again have a problem

Mr. Crowley

getting support for good educational programs," he predicts.

There are other spin-off effects from the program, as well. Many of the materials especially developed for the pre-schoolers circulate throughout the kindergarten rooms, emphasizing the program's total integration into the Highland School setting. And mothers who have had the rich experience of day-to-day contact with the program are now, as their children "graduate," moving into the system as teacher's aides where they bring an extraordinary level of expertise to their work.

Mr. Crowley identifies another important offshoot of the pre-school effort: the creative use of space. "We're setting up space in a more individualized manner now in all of our classrooms, finding interesting arrangements for tables and chairs and places for kids to climb into and on top of. And we're beginning to get rid of those glaring lights. We were moving in this direction long before the pre-school program began, but it has certainly provided great impetus for change throughout the school system."

And what of the bottom line? Can the program's substantial costs be justified?

Mr. Crowley shuffled through a stack of papers on his desk, extracted one, adjusted his glasses and said: "Yes. In our best judgment, the answer is yes.

"There have been to date 11 graduates of the program. Seven are functioning well in regular classes. Two are in regular classes with an aide. One is in a learning disabilities class, and one is in private placement. Of that group of 11, in our best and most conservative judg-

ment, three would now be in private placement, if they had not had this pre-school experience, and two would have required special programs.

"It is a cumulative thing. The larger the number of children, the greater the potential financial reward. For example, in our present group of 15 four-year-olds, we believe that three would be in or be headed for private placement. Of those three, we now believe that, after this program, one will move into a learning disabilities class, one will require an aide in a regular classroom, and the other, along with all of his classmates, will be able to function appropriately in the normal classroom setting. And remember, these are *all* children with strong predictors of learning disabilities."

All of the children have shown meaningful growth in the program, and some have registered startling gains. Shawn and Bobby are good examples.

When Shawn's gross motor skills were tested in October of 1973, when he was three, he barely got on the scale, registering at about a four-month level. By May of 1974, he was up to the three-year-old level. His gain in other areas was nearly as astonishing. In his approach to the materials and common sense, he was at the one-year-old level in the fall of 1973. By spring, he had reached his own age level. And in social skills, he advanced from 2.5 years in the fall of '73 to 4.5 years by that spring.

Bobby's growth came in one dramatic spurt. The hyperactive child who could not attend early in the program, Bobby tested on the infantile level in fine motor skills as he entered the program as a three-year old. By mid-year, he had shown no appreciable growth. But by spring, Bobby was functioning very near his own age level. In communication skills in this same period, he advanced from a 1.7-year level to his own age group.

The children's progress is evaluated from several perspectives. The Stanford-Binet Intelligence Scale Test is given in its entirety to each child admitted to the program during June or July, and again the following spring by Gwynette Caruthers, the school's psychologist and the program director. It is administered individually in her office, and the results are shared with the parents.

The Gesell Developmental Examination is given to each child individually by Jackie Michaels of the Gesell Institute of Child Development, New Haven, once during the summer before school and again in the spring. The exam is given at the school.

Additionally, a Teacher Inventory is completed for each child in the fall, and again in the spring, by the program staff. Those items requiring direct observation may be given to the evaluation and dissemination specialist, Emily Thach, to complete while observing in the classroom.

Parents' views are solicited early in the school year, and again in the spring, in a Parent Questionnaire which asks for detailed observations about their own child.

Finally, a short summary is written by the classroom teacher, in conjunction with the aide and the teacher supervisor, describing diagnostically significant highlights of each child's first day in school, a summary of his behavior and progress in January, and a final summary again in May. Continuous reports are being made, as well, every week of specific classroom observations and current objectives being worked toward by staff and parents. The September, January and May summaries are compared, along with continuing teacher reports, to identify a child's problem areas and to record his growth in those areas.

The results of 1973-74 pre-and post- testing show mean growth in excess of one month's gain in one month's time, on both the Stanford-Binet and Gesell Developmental Scales. The norms set for growth in normal children on these tests is a year's growth in a year's time. Children with special needs might be expected to fall short of this growth.

Actually, program children showed 12.4 months gain on the Stanford-Binet in nine months time, and 15.7 months gain on the Gesell Developmental Scales in 11.5 months time.

Eight out of 18 children pre-tested on the Stanford-Binet were found to be functioning below an age-appropriate level. In post-testing, only six of 18 were functioning below age level, and of these, two were functioning more nearly at their own age level.

Fourteen of 15 children pre-tested on the Gesell Developmental Scales (of developmental maturity) were found to be functioning below age level. In post-testing, all 15 were functioning below age level, but nine of the 15 were functioning more nearly age-

appropriately.

Results of the Parent Questionnaire and Teacher inventory show a pattern of student growth, although there are no norms against which to assess their growth. Gross motor skills and the ability to concentrate and attend showed the largest comparative gains.

The gains recorded on the Stanford-Binet and the Gesell Developmental Scales "exceeded expectations," Mrs. Caruthers said.

And, she added, "the patterns of growth tend to be more important than the summation of growth. These children tend to make the greatest measurable gains in areas of their more obvious weaknesses. When the areas showing minimal gains were examined, it was learned that in some cases adults had not verbalized these areas as being of concern. For example, physical movement and communication for a cerebral palsied child were important areas of concern.

"Constant praise and encouragement during his progress in physical activities helped to generate advancement in social skills, as well. Testing revealed little progress in problem-solving or common sense items, which were more or less bypassed. This will be an objective for him next year.

"The heart of the program lies in the balanced team studying and planning for the specific need of the child."

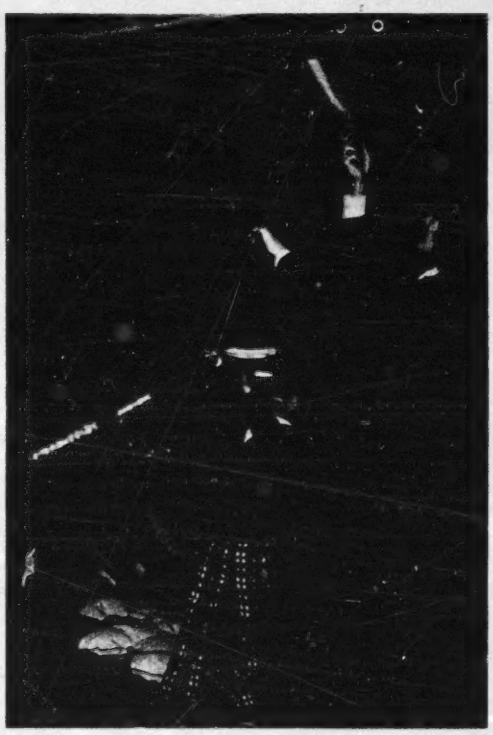
While gains for these children exceeded expectations, Mrs. Caruthers points out that the small number of children both pre-and post-tested to date "means that the results cannot be considered statistically significant. But if these same levels can be maintained for another year, their statistical significance will be demonstrated."

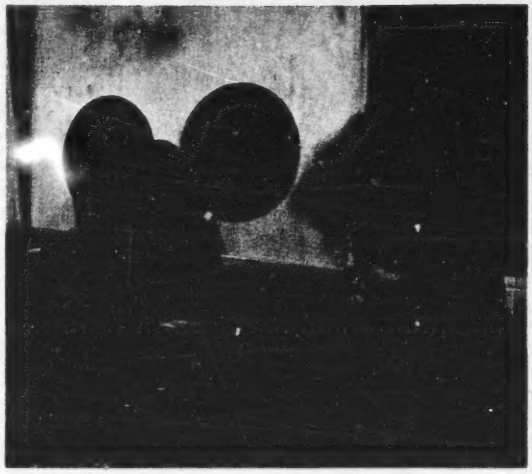
Increasingly, the pre-school program is exhibiting a pervasive quality. Special education teachers in the Cheshire system are coming together with the pre-school staff to share insights. The Drop-In Center has motivated many families in the town to take advantage of the pre-school team's services. The pre-school team was invited to take a major part in a seminar sponsored by the Educational Facilities Laboratory, the Ford Foundation and Columbia University. As a result, Columbia may use the Cheshire model as an on-site facility for a doctoral candidate.

Most importantly, surrounding towns are expressing a growing interest in the innovative concepts. Many are now considering some form of parental involvement in the learning process.

"We're convinced that the central program concepts must be suitable for broad application, or what we have will simply wither and die," said Mrs. Caruthers.

"And we don't intend to let it die."





Top, mother of another child gets involved with Greg in a problem-solving task while Teddy offers support. Bottom, integration for Neil is strengthened in this up, in and out activity guided by Mrs. Rho.

discoveries

There are new discoveries every day as staff, parents and consultants observe and work with these special children. The program itself exemplifies the discovery process – one insight leading inexorably to the next step in creating workable learning patterns.

And yet some discoveries have evolved as bench-marks in the program's development, and are now recognized as integral parts of the whole. They include:

✓ It is wise, logical and educationally realistic to view children, of whatever age, in terms of their intellect and their level of maturity, rather than to arbitrarily group them by age level. Only in this manner can truly meaningful educational planning and programming be done.

✓ For all young children, Mother can be not only the first but potentially the best teacher, and she should therefore be encouraged to enter into the formal learning process within the school.

✓ Programming for young children with special needs must, to be effective, be all-inclusive, moving from school to out-of-doors play into the home itself.

✓ To accomplish these goals of parental involvement in the learning experience, and an all-encompassing learning environment for the child, traditional inhibitions and restrictions must be broken down to not only permit but to encourage parental involvement.

✓ In dealing with young exceptional children, it is often true that the learning problem is shared equally between child and mother. The frustrations which result from such a problem are not limited to the child alone. Thus in many instances the mother, and the entire family, will benefit as much from this special programming as will the child himself.

✓ Mothers need outside help to gain a measure of objectivity in dealing with their child's problem.

✓ Siblings of program children often gain greatly from Mother's participation in the program; a large number have been found to have special educational needs, as well.

✓ Perhaps the greatest benefit which the program can give to a troubled child is self-confidence in his ability to succeed at many tasks. This is a crucial first step in learning how to learn.

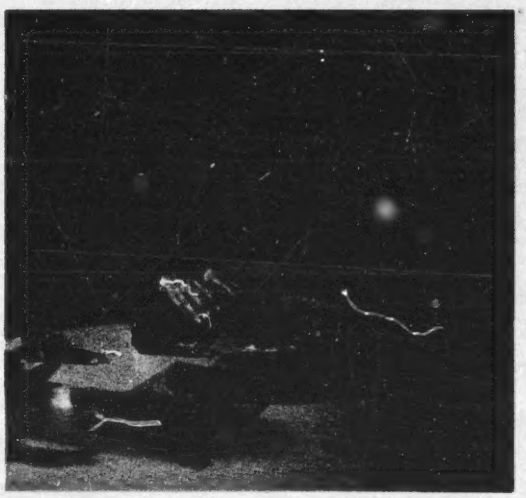
✓ The program has demonstrated that in many instances, the seriously troubled child need not be placed in an isolated setting segregated with children who share similar disabilities. Rather, with strong support, he can look forward to meaningful participation in the mainstream of the educational experience.

✓ For the less-seriously troubled child – the classic "learning disabled" youngster – it has been discovered that learning the nature of his problem is often the first important step in compensating for or overcoming the problem. This can most often be accomplished through observation in the play setting.

✓ A child's environment has a profound affect on the way in which he learns.

✓ The full benefits of the program can only be delivered to a child through a balanced team approach – professional staff, parents, carefully selected consultants, all working together in the on-going process of observation, evaluation and implementation.

✓ A teacher functions best as a catalyst, a person who causes educationally worthwhile things to happen but who is not herself the center of action.



Mother and child sharing a learning experience – the heart of the pre-school idea.

problems

The "symphony of learning" is a complex structure, not without problems and always in need of attention. Those who make the repairs are quick to tell you it is well worth the effort.

The educator exposed to the idea for the first time must inevitably ask, "Can a program which so delicately meshes the talents and abilities of so many people hope to succeed without a Gwynette Caruthers, a Lois Rho, a John Streff, Felix Drury and all the rest?"

The answer, of course, is yes. Perhaps birth called forth special attributes, but the program in its design and in its physical trappings is a highly exportable product. Or it is of no real value at all.

Indeed, it does require money. And while there will always be programs for the seriously troubled child, no matter how expensive, in these days of acute financial distress it will take a continuing vigorous effort to keep the needs of children with handicapping conditions before the budget-makers. That is a serious problem.

In the Cheshire program, the combination of various disciplines has created a whole contribution to the child with special needs that is greater than the sum of each individual discipline. But a deficiency is recognized. There is a real need for a neurologist pediatrician as a consulting member of the team, and efforts are being made to obtain the services of such a specialist. It's a problem.

Another problem is the needs of the mothers. The sole criterion for selection of mothers is their willingness to give the necessary time to their child within the classroom. There is, as a result, a broad cross-section of economic, social, emotional and intellectual levels which must be considered individually and in relation to the problems of their child, and indeed, of all the children since they interact so freely.

This problem has multiplied the demands on the staff, who must consider individually 1) the child; 2) the parent and 3) the parent-child combination. In educational circles, it is customary to think of a special education teacher serving six children. In this program, instead of three teachers serving 26 children, there are, in fact, three teachers serving 78 individual learning situations.

As this burden multiplies for the teachers, however, so do the benefits. Parents freely express how their greater understanding of learning behavior has benefitted other siblings. Schools report better relationships with parents who have participated in the program.

These are considerations which must be evaluated when funding for such an effort is considered.

There are, of course, other problems. Teachers outside of the program may view it with a certain wariness, yet to be convinced that a mother can function in a positive way within the classroom; or perhaps envious of the flexibility which the program demonstrates, or of the funds which support it. The needs of these teachers must be carefully considered; it is important that they be made aware of the program's full educational implications. With the evidence presented to them completely, they could and should become strong advocates for this approach to helping children with special needs.

More problems? Mothers in such a setting may tend to lose their identities as teachers. Some come to feel (briefly) that the professional staff really isn't needed at all. It is a pitfall to avoid.

Teachers must develop a subtle skill in bringing child and mother together in a way that is meaningful and rewarding to each. It is a skill not easily acquired.

Parents, by whatever means, must always be made to feel that they are participating in the program in a very positive manner. Negativism could bog the program down in a morass of self-pity and hopelessness.

Incrementally, as such a program begins, all members of the team must develop open, honest relationships toward the common end of making the program work. There must be an uncommon willingness on the part of staff and parents alike to share, to give of self, to develop a sense of complete dedication to a process which may free a troubled child to explore all that life has to offer, to his fullest

potential.

It has happened to children in Cheshire. Some withdrawn, painfully shy, refusing or unable to speak their needs. And suddenly they are alive, chattering with their little friends, shouting their identities for all to hear:

"Brian!! It's me! It's me!"

Nothing makes problems melt away quite as fast as the joy of a young child.

and what now?

Cheshire, struggling to retain remnants of its rural heritage, is today a beautiful, rapidly growing suburb for the cities of Waterbury, Meriden and Hamden.

It is a community of stately homes, impressive lawns, well-kept gardens. Average income is well above the norm.

It is not, by and large, a community of neighborhoods. Children are inclined to import their friends; play is most often restricted to back yards. For most kids, the largest room they ever see is the family's double-bay garage.

These are the homes of young children, of teenagers – and of children with special educational needs. What kind of school can lend a sense of totality to their learning experiences?

In Cheshire, the school is in the talking stage. It is a proposed addition to the Highland School for the pre-school program.

Its four rooms are each exactly the size of a double-bay garage. Its landscaping will be similar to the somewhat formal gardens so prevalent in Cheshire. Each of the rooms will have its own entrance, and each will have a porch – just like home. With Highland School, it will share walls of glass, so children can observe both ways, heightening the sense of integration.

In its exterior design, then, the proposed addition will consciously serve as a comfortable, familiar bridge between home and school.

You may be assured that the rooms themselves will reflect everything that has been learned in meeting the special needs of three and four-year-old children with learning problems. There will be an impressive range of carefully developed educational materials. Lots of places to climb into and on top of. Lighting which can be precisely controlled. Color introduced into the spaces with thoughtful care. The effort to replicate the out-of-doors will be intensified: sand and water to play in, "trees" to climb, valleys to explore.

And of course the balanced team will be at work, continuing its efforts to break through with every child, to adapt its thinking, its program, its curriculum to still another unique learning style.

Parents will continue to insist that it is "their" program, "their" building, and of course they will be right. Increasingly, the voices of concerned and informed parents will dominate educational affairs throughout the community.

In the spring of 1975, all of the elements are in place, awaiting only the funding. And the funding seems likely to come.

With validation as a State Title III model, and national validation being considered, the staff realizes that it may be called upon to take an active role in organizing similar programs in other communities. Regardless, other communities will continue to come to the program. Its influence is steadily expanding. It does have a magnetic quality.

Visitors will continue to slip into the observation booth, unnoticed by the children. With an expert voice to guide them, they will search for the essence of this successful educational idea.

The mother in the classroom?

Unusual, creative use of space?

Constant observation by and reaction from competent consultants?

Unusually skilled teachers?

In time, if they are patient, they will learn the answer. It is all of these things, and more. For as the program insists on a totality of experience for its children, so it, too, is a totality – weakened beyond real worth if a single of its important elements is stripped away.